the American Perfumer and ESSENTIAL OIL REVIEW

COSMETICS · SOAPS · FLAVORS

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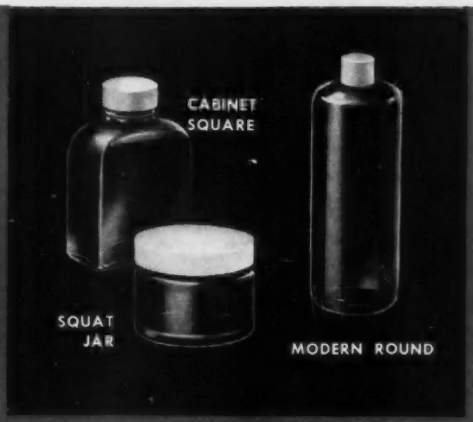

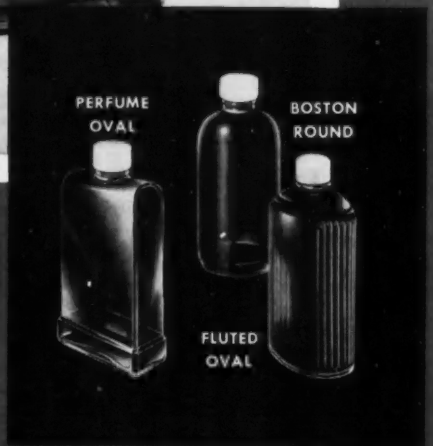

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the American Perfumer and ESSENTIAL OIL REVIEW

COSMETICS · SOAPS · FLAVORS

COSMETICS · SOAPS · FLAVORS

Established 1906

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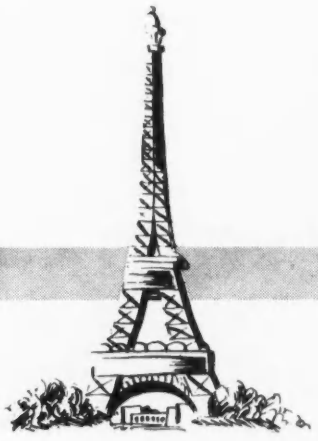

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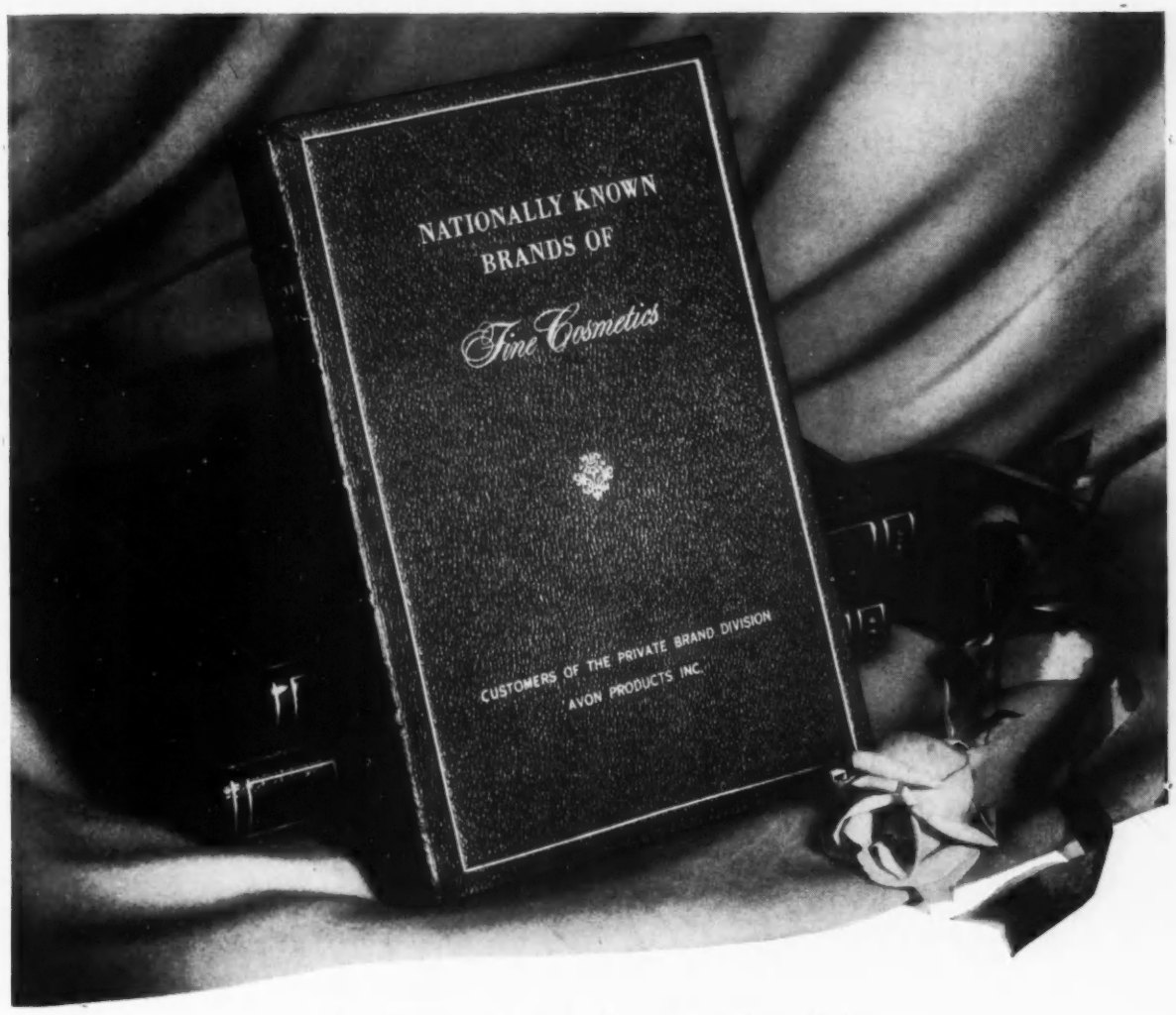

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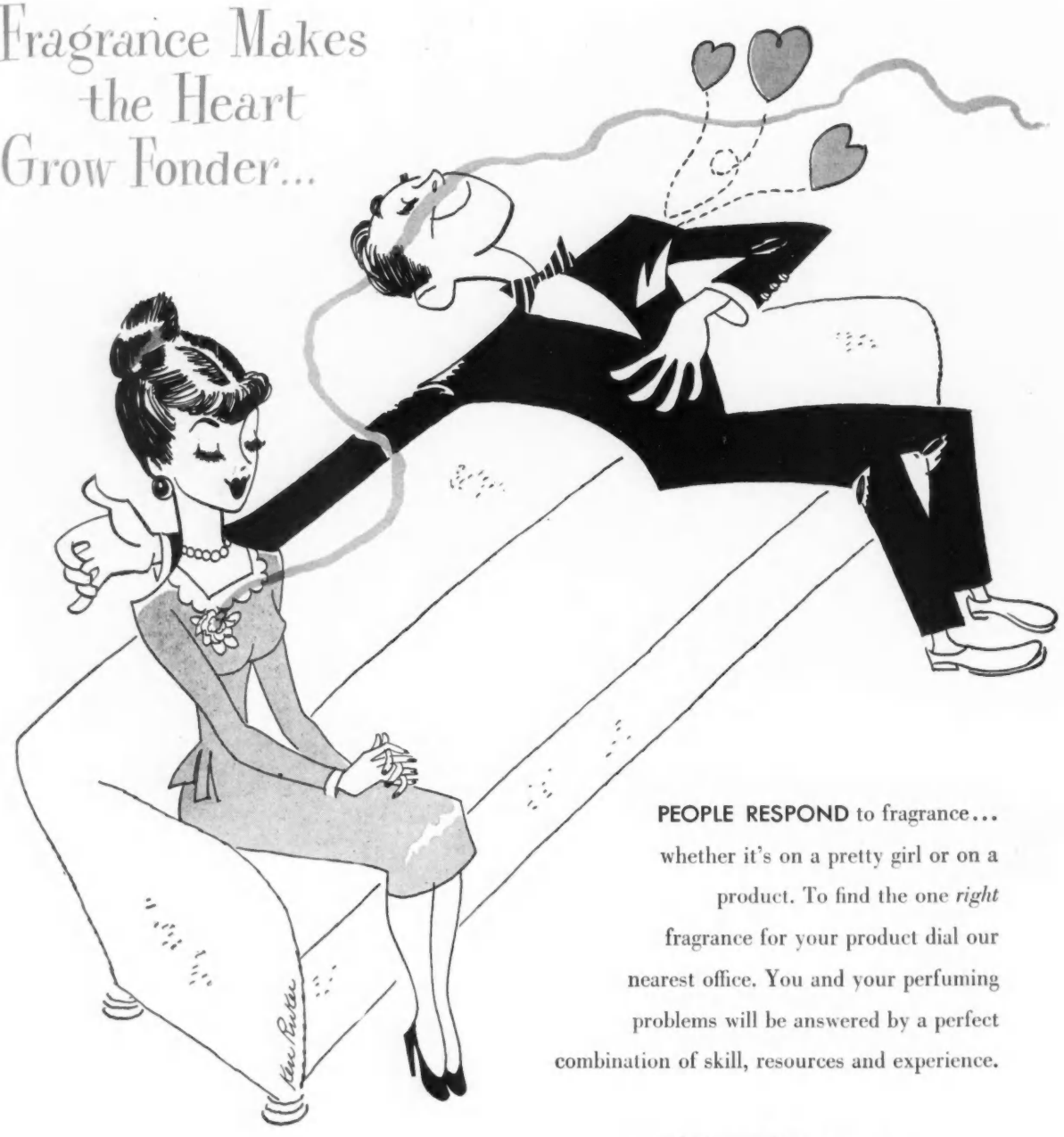

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- **CUMIN KETONE** . . See how only ¼ to ½% added to your present floral fragrance heightens and freshens the effect.

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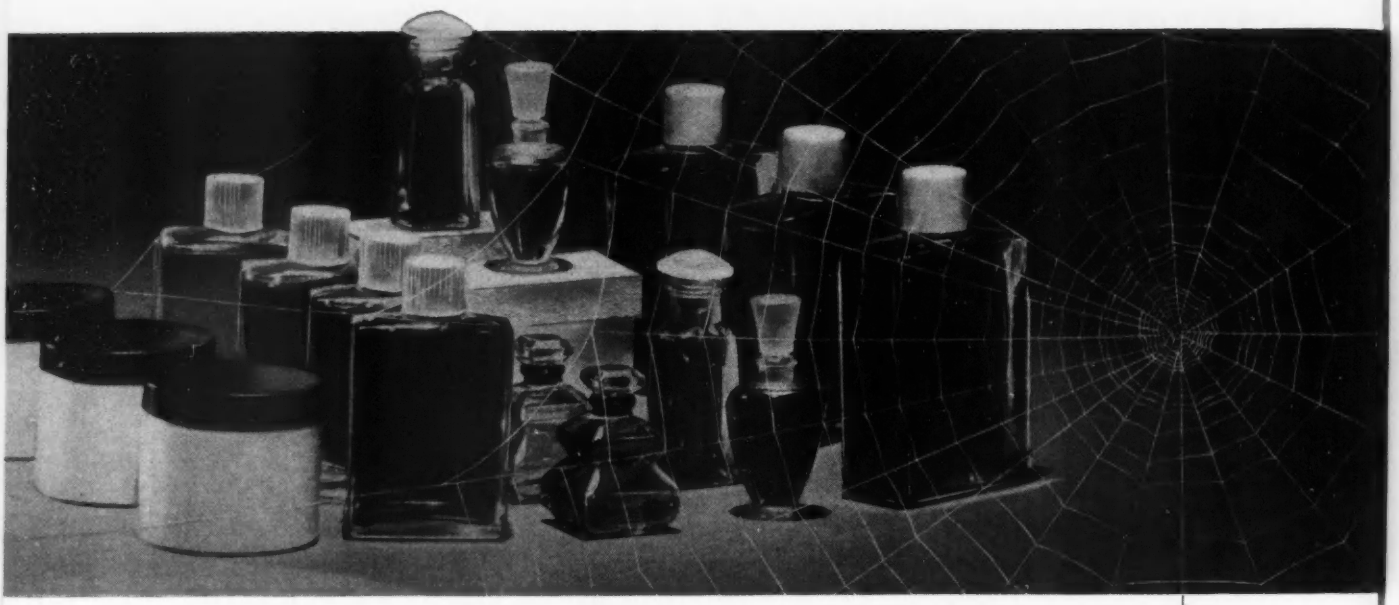

Shelf-life difficulties stem from two main causes: lack of just the right product appeal to assure steady consistent consumer demand; or instability inherent in the product which causes premature separation or deterioration.

The first is sometimes caused by that elusive, intangible something in fragrance that marks the difference between a single sale and a steady customer. The second can be prevented by proper selection and testing of ingredients and other factors affecting stability of the finished formulation.

When you specify Givaudan as your source, these two "shelf-life" factors receive careful attention. We will welcome the opportunity to provide more information on this phase of Givaudan service.

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Desiderata

BY MAISON G. DENAVARRE, F.A.I.C.

Notes

F. D. A. gives the green light to talcs with 5 per cent or less boric acid. . . . One company, one of the biggest in the baby talc business, dropped boric acid some time ago to be on the safe side. . . . Headlines in a Canadian newspaper raise a noise about the toxicity of borated talcs. . . . The Pharmaceutical Journal (British) runs an interesting article entitled "Why Are We Stodgy?" in the February 13, 1954 issue, page 131. . . . There is meat for thought in it for all of us. . . . Costs of sterilization by radiation were among the subjects discussed at the Harwell Atomic Energy Research Center in England . . . for drugs it is expected to be of an order of 5 pence per pound of product which is pretty low. . . . Apropos of the address given by Post before the Society of Cosmetic Chemists last December, Heide and Lemmens have just published a paper on chromotographic methods in flavor analysis, in our British contemporary *Perfume and Essential Oil Record* for January. . . . This writer has always had a great respect for Freddy Wells, Editor of *Soap, Perfumery and Cosmetics* because Freddy has a good perfumer's nose, a sound scientific understanding of toiletries, a boundless energy and a cosmopolitan view on subjects personal, political and scientific. However, this made him a bit of an intellectual hermit in my mind. Now it is with keen delight that one can read about Freddy's appraisal of two French coiffures on as many comely models. In fact, his reference to a particular one in the February issue of his magazine, leads me to understand the "man" side of him. I like her too, I mean the coiffure of course. . . . A well known and internationally famous Swiss concern is offering a new preservative—deodorant-bactericide, to British users. . . . It is a chlorinated salicylanilide requiring 1½ per cent in soap. . . . The sole sorbitol supplier in the U. S. is to produce glycerin . . . probably from glucose, a logical raw material . . . this should have a salutory effect on glycerin prices for there is far less fluctuation in glucose prices than in fats and oils . . . time will tell. . . . Promising antibiotic, an amino acid derivative, called AZESERINE shows anticancer possibilities with a number of groups testing it for just that. . . . Coumarin is out for flavors for food . . . products containing it will be considered adulterated within the meaning of the Food, Drug and Cosmetic Act. . . . Sobell, speaking before a recent Conference on Mineralized Tissues at the New York Academy of Sciences, said that the great strides made in basic tooth and bone knowledge foreshadow caries control. . . . Maybe a dentifrice will then be sold for re-odorizing the mouth and polishing the teeth.

Goodbye Castor Oil

A main supplier of polyethylene glycols has for some time been suggesting the use of these compounds in hair dressing. Company employees have been using laboratory samples with considerable satisfaction. Costwise, the material runs about 25 per cent higher than castor oil. In the alcoholic type of product, this difference in cost can be neutralized by the lower alcoholic concentration needed. Thus castor oil requires around 80 per cent alcohol to keep it in clear solution. The new polyethylene glycol types are of two types namely, water soluble and hydroalcohol soluble. In the latter case, it takes about half as much alcohol for these compounds as for castor oil. So here is a significant saving.

Naturally, if you are going to make an emulsified hair dressing, then you have another advantage, for castor oil is really tough to emulsify if you haven't tried it. Some thirty per cent of one of these newer lubricants easily makes an emulsion with about 5 to 6 per cent of an alkanolamine stearate such as the triethanolamine derivative.

As a side light only, cold waving solutions can use either the water soluble or the emulsified types.

Aluminum Chlorohydroxide

A new supplier makes this interesting product as a concentrated solution only. So now, there are two companies offering this material. The first source has it as a concentrated solution and a dry solid in several mesh sizes.

Hormone Cosmetics

Now that one can get Estrone and Estradiol with labelled C^{14}, it should be possible to determine how much of the estrone is re-

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new
perfume
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tained in the skin, how much excreted in the urine, etc. Up to now measurements have been little better than empirical. With these radio-active steroids, the work can become quite quantitative.

Questions & Answers

1062: Skin Peeling Lotion

Q. I will greatly appreciate it if you will help me to formulate a lotion (preferably) that will peel the skin. I have tried various combinations of resorcin, salicylic acid and sulphur, but have failed to get satisfactory results. In most cases they do dry the skin, but fail to peel the skin in spite of lubricants, hot compresses and steaming. I hesitate to use strong solutions, with resorcin as the main active ingredient because of the dark patches it leaves on brunette skins that are difficult to remove later on; also, because of the restrictions Washington places on these preparations. Yet, I know of companies that sell similar products with Washington's blessing, no doubt.

L.M., Washington

A. Our general policy is not to recommend formulations for products that are outright drugs. Secondly, we do not recommend formulations for products which, in our opinion, have a dangerous potential. The skin peeling product you have in mind is in this category. We can tell you, however, that the ingredients you mention are the ones most successfully used but beyond that we are afraid we cannot go. Actually, there are very few nationally sold skin peeling preparations which are true skin peelers, all because of their harmful potential.

1063: Hand Cream, Powder Base

Q. I am interested in adding to my line a powder base in a cream form, good for dry skins, and the new various shade tinted type. Also a good hand cream, and if there is a good facial pack for mature skins, good as a stimulant for poor circulation, or a circulation cream, please inform me about that. I have a wonderful facial pack for oily skin types, but I am interested in using a different type preservative, also I would like to know if there is any liquid I could use in making this pack a "Prepared Pack," as heretofore we have only sold it in the powder form to be mixed as desired, with water, to make a paste soft enough to apply to the face. But I would like to have it on the market in the ready to use method. Can you give the name of a firm that has the dusting powder puffs, also a company that makes face powder boxes and dusting powder boxes? We have not had a dusting powder, and this too, I would like to add to the line.

T. E., Tennesssee

A. We give you below a formula for a hand cream and powder base in cream form:

Hand Cream

A	*(Stearic acid*	*15.0%*
	(Isopropyl palmitate	*2.0%*
B	*(Potassium hydroxide*	*1.0%*
	(Sorbitol syrup	*18.3%*
	(Water	*63.7%*
	(Methyl p-hydroxy benzoate	*0.15%*
C	*Perfume*	*q.s.*

Preparation: Heat (A) to 80° C. Heat (B) to 82° C. Add B to A slowly under continuous agitation. Continue agitation to 45°–50° C. Perfume and package.

Powder Base

A	*(Isopropyl palmitate*	*1.0%*
	(Stearic acid	*12.0%*
	(Sorbitan monostearate	*2.1%*
	(Polyoxyethylene sorbitan monostearate	*1.0%*
	(Sorbitol syrup	*3.0%*
	(Propylene glycol	*12.0%*
	(Titanium dioxide	*2.0%*
B	*(Talc*	*8.0%*
	(Iron oxide color	*1.0%*
	(Water	*58.0%*
	(Methyl p-hydroxy benzoate	*0.15%*
C	*Perfume*	*q.s.*

Preparation: Heat A to 90° C. Heat B to 95° C. Add B to A slowly and with constant agitation. Perfume at 45° C. If not smooth and uniformly dispersed, pass through homogenizer or ointment mill. Pack. Note: this cream goes through several stages during the mixing operation, during which it may appear to separate. Continue the agitation, nevertheless, and a stable, smooth cream will result. As to your face pack, you are not able to mix this in advance and will have to keep selling it the way it has been sold. The only way we know to keep bugs out of your product is to not make it during the warm season of the year or to have the material when finished, especially processed, to kill any eggs which might be present and which will hatch into bugs. Names of suppliers of powder puffs and dusting powder boxes goes to you by letter.

1064: Sunscreen Products

Q. Under "Desiderata" in the July 1953 issue of "The American Perfumer & Essential Oil Review," mention is made of a recently developed sunscreen (ethyl-p-dimethyl aminobenzoate) by Kumler and Daniels. As we have not been able to locate the address of a company by this name, we assume that the names given refer to two individuals who have developed this compound. We would appreciate it very much if you could supply us with the information which would enable us to obtain a sample of this material, data on its chemical and physical properties, and suggested formulations of suntan lotions or creams in which it may be incorporated. We are also anxious to obtain informations of suntan lotions or creams in measuring the effectiveness of sunburn prevention agents when incorporated in creams or lotions, such as the use of the spectrophotometer in this respect. *J.E., New York*

A. The sunscreen is offered under the name of Parbenate at Barnes-Hind Lab, 430 Post Street, San Francisco, California. As to measuring the effectiveness of sunscreen products, we hold that only clear formulas can be tested by the Beckmann spectrophotometer. Opaque creams and lotions must be tested on the skin and for this purpose we like the Good Housekeeping method which you will find described in the book, CHEMISTRY AND MANUFACTURE OF COSMETICS, *of which I am sure you have a copy. Testing on the skin requires application of an even film of sunscreen for protection is proportionate to the film thickness according to Beer's Law. It further requires that the intensity of artificial ultraviolet light must be the same on all test squares of skin. Therefore, only the very flat and smooth portion of the middle of the back can be used.*

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Soaps, detergents, creams, colognes, sticks and lotions containing G-11 are making dramatic sales increases because they combat the fundamental cause of body odor.

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G-11 remains on the skin, even from soaps which are thoroughly rinsed off with water. Thus the deodorant action persists for days. Persons who have used deodorants with G-11 for three and four years show no immunity to their action.

Over seventy scientific articles, mostly by independent researchers, have been published over the last ten years attesting to the antibacterial and deodorant performance of G-11.

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Aerosol Cosmetics

FRANK R. ZUMBRO*

Helena Rubinstein's Cologne Foam aerosol sprays fragrance in a creamy base which is said to make it last longer.

TAKING a quick peek into the ladies' boudoirs, the fast-growing aerosol industry figures push-button products for the dressing table might boost their production this year by at least 50 million packages.

That's a healthy potential for a relative newcomer. Total estimated production of all aerosol products last year, with the industry just winding up its seventh full year in the consumer market, was around 140 million packages. And that figure covered more than 45 different types of products in the household and industrial field.

Cosmetics Makers Use 20 Million Units

The cosmetics segment of the aerosol market got its start only in the last three years and, with the exception of hair sprays and sun tan lotions, was still largely in the development stage at the end of 1953. Even so, production of cosmetic items in the pressurized packages last year is conservatively estimated at 20 million units, including sun tan sprays, colognes, foot sprays, hand lotions and hair preparations.

"I would estimate the business will increase ten times its present rate during the next two years," predicts one of the nation's largest manufacturers and merchandisers of cosmetics. "The future of aerosol cosmetics is unlimited," he adds.

Cosmetic industry interest in the aerosol package is tied both to the convenience the container offers the consumer and to product protection and preservation. Not only does the self-spraying package offer freedom from contamination but, perhaps more important, it seems to answer the long-desired feature of maximum fragrance protection.

Air is the eternal enemy of fragrance, cosmetic authorities point out, and one of the industry's biggest problems is the change in fragrance in an alcohol-base product as the alcohol evaporates, either naturally when the product is opened for use or through leakage in the container closure. Because the aerosol container is gas-tight, it exposes to the air only that small amount of the active ingredients being sprayed when the valve is depressed. That should hold the aromatic loss to a minimum.

Atomizing Perfume and Cologne

Many cosmetic experts look on the aerosol package as the most important advance in the last century in the fragrance industry for another reason. Atomization, they explain, is generally accepted as the best—some say the only—way of applying perfumes and colognes for maximum effect. Mechanical atomizers, which use a rubber "squeeze" bulb to generate air pressure within the perfume container and force the perfume out through a small orifice in a spray of fine particles, have not been entirely satisfactory, they say. They not only allow air to enter the bottle and thus break down the fragrance but they also fail to stop evaporation. In time, too, the bulb deteriorates and loses its ability to produce the pressure required for good atomization.

Aerosol dispensers give even finer atomization of the perfumes and colognes than do most of the mechanical atomizers and that, coupled with the anti-evaporation

* Kinetics Chemicals Div., E. I. Du Pont de Nemours & Co.

feature of the gas-tight container, perfumers say, makes them highly desirable.

Glass Containers Now Available

One of the biggest factors in the optimistic outlook for cosmetic aerosol products is introduction of the glass bottle for pressure-packaging. Models introduced late last year have proved successful in initial market trials and apparently open up a broad new avenue to a host of moisture- or alcohol-containing products that had been too corrosive to be packaged satisfactorily in metal aerosol containers.

The importance attached to glass aerosol containers is reflected in unofficial industry estimates that, by the end of the second year after successful adaptation of glass packages, a single product—anti-perspirants—alone may account for 50 million aerosol packages per year.

Glass packages, because of their "see-through" qualities and adaptability to unusual shaping, would provide the aesthetic appeal so important in the marketing of products for use on the dressing table. Though a number of toiletry products in the conventional metal aerosol containers have been successful, marketers generally feel that the metal container—similar to those in which dozens of other household aerosol products like insecticides, room deodorants, and glass cleaners have been packed—lacks the point-of-sale eye appeal so essential to mass sales of cosmetic items.

Metal containers, however, will not give up their place in the cosmetic aids field entirely to glass. From a performance standpoint, metals are satisfactory for certain cosmetic products, such as hair lacquer, which present no serious corrosion problems. Can manufacturers are working constantly toward more resistant coatings for the inner surfaces of metal containers, and to add package appeal several large marketers have "dressed up" the tinned metal aerosol container with attractive tube covers and decorative tops that hide the dispensing valve when the product is not in use.

Many improvements are being made, too, in the exterior finishing of metal cans—colors are richer, finishes harder and more resistant to abrasion. Special pastel colors and attractive metallic-finish caps have been developed by one of the large container manufacturers especially for the cosmetic trade.

Drawn aluminum containers also have been adapted for several cosmetic products and, provided they remain competitive price-wise, may hold their own against the glass container.

Aluminum, because of its adaptability to attractive surface treatment by brushing or high-polish finishing, seems to offer the best answer, so far as metal containers are concerned, to the problem of aesthetic appeal of the package. It's being used successfully in packaging of several aerosol anti-perspirants but whether its corrosion-resistance will make it adaptable to a wide variety of cosmetic items is a question as yet unanswered. Some manufacturers think production of aluminum aerosol containers will hit three million in 1954, jump to seven and a half million the following year.

Courtesy Du Pont Co.

Aerosol shave cream sales may run between 50 and 60 million units this year.

Cost, too, enters the aluminum container picture. From a raw material standpoint, it's more expensive than either tinned metal or glass. However, aluminum is lighter than either tinned metal or glass and proponents of the aluminum package think that savings in freight and shipping may bring it in line with the other two. Glass, they point out, also entails higher shipping preparation costs to preclude breakage.

Advantages of Metal Containers

Metal container manufacturers also cite safety advantages in nonbreakability of their containers as a significant "edge" over glass. That's a big problem, too, in the minds of many marketers who always are wary of possible damage suits for injuries sustained in the customers' use of their product. Any glass package offers the potential danger of slivers and jagged edges from breakage if it's accidentally dropped. How much

Courtesy Du Pont Co.

A fine spray of sun tan oil from an aerosol container permits a more even application and reaches the back easily; also, no sand can enter the dispenser.

additional danger is involved when the contents of the bottle are under pressure is the big problem.

Plastic-coated bottles are available and overcome, their manufacturers maintain, the glass container's potential danger of shattering. The tough plastic coating, however, adds to the cost of the container. Cosmetic items are highly competitive price-wise and any slight increase in packaging costs makes manufacturers think twice. Much depends on the consumer value placed on the added safety feature of the coated bottle.

And, while the "see-through" qualities of a glass container sometimes are desirable from a sales standpoint, metal container manufacturers think those same qualities might lead the consumer to think she's get-

The aerosol makes the application of an even coating anywhere easy, as in Helena Rubinstein's Hair Spray.

ting less for her money in glass aerosols because the required "head space" for gas at the top of the aerosol container might suggest only a partial fill. Some formulations, in which the propellent and active ingredients are not miscible and exist as separate layers of solution within the package, may not hold eye appeal to the consumer they add, in the clear glass package. The frosted glass container, because of its semi-opacity, might answer such an objection.

It's possible, of course, that entirely different packaging materials may be adapted to aerosol products. Plastics are being investigated—they already have found successful applications in valve components on some of the self-spraying packages.

Polyethylene materials, basis of many "squeeze bottle" packages already on the consumer market, would not appear to be adaptable to aerosols because of their permeability to the fluorinated hydrocarbon compounds used as propellents.

Leaders in the development of glass aerosol containers are the Zonite Products Corp. and the T. C. Wheaton Co.

Actually, they were not the pioneers in glass aerosol packaging. That distinction probably belongs to Charles L. Gebauer, president of Gebauer Chemical

Courtesy Du Pont Co.

Pressure in the aerosol breaks up deodorant compounds into such small particles that a little goes a long way.

Co. of Cleveland, Ohio, who also developed what was probably the first aerosol product to use low-pressure fluorinated hydrocarbons as a propellent. Gebauer held patents on a glass aerosol dispenser, dating back to the early 30's, and markets in a small way a number of self-spraying pharmaceutical items like tannic spray for burn treatment and a personal deodorant. His packages incomporate a simple two-ounce bottle with a valve made up of a spring closure over a glass capillary tube inserted in a cork.

First aerosol product to appear in sizeable quantities in a glass container, however, was Zonite's "Larvex" moth proofer—a product which, because of the reaction of some of its ingredients with metal, did not lend itself to the metal aerosol package. Introduced on the consumer market early in 1953, the Zonite package consists of a 16-ounce glass bottle protected by a fibre "overcoat" and metal ends which protect against shattering of the glass if the package is dropped accidentally. It also represented the first wide-scale use of a low-pressure propellent, with dispensing pressure in the range of 10 to 15 pounds per square inch gauge at 70° F. instead of the average of 38 pounds used in the majority of the aerosol products.

Shortly afterwards, Zonite announced development of a satisfactory hour-glass shaped container about an inch and a half in diameter at the base and about three and a half inches high that provided the first eye-appealing glass package for the cosmetic aerosol field. Available in both plain and frosted surface in a two-ounce size, it made its first commercial appearance as a vehicle for perfumes and colognes. Other bottle shapes are available.

Wheaton also introduced about the same time a two-ounce glass bottle with a plastic over-coating for shatter protection. Both the Zonite and Wheaton bottles can be silk-screened for product identification.

Several colognes and perfumes already are being marketed in the two-ounce Zonite hour-glass bottles and marketers report their sales have been good. In fact, the package has attracted the attention of at least one French perfumer, Carven of Paris, who introduced two aerosol-dispensed colognes in leading women's stores throughout the nation early this year. Merchandisers report sales of the Carven product have been "phenomenal" and indicate the big factor behind the mass purchases is the aerosol package principle rather than the manufacturer's name.

The aerosol attains new glamor in such feminine packages as Helena Rubinstein's Hand Delight.

Sales forecasts in the cosmetic industry are based on second-guessing the feminine mind as much as they are on cold, hard facts. But conservative manufacturers think that 1954 production of colognes in the glass aerosol packages easily could run into ten million units of the two-ounce size.

Aerosols for Other Cosmetics

Other glass-packaged aerosols that might be in the offing are a closely-guarded industry secret. Some work is being done, however, on such things as depilatories, fingernail polishes (one manufacturer is reported to have developed already a workable mask to assure spraying the polish only on the nails), dentifrices, hair dressings, antiseptics for other than intra-oral application, and body powder.

Hand lotions and shampoos, both expected to be adaptable to either metal or glass containers, represent a probable potential of five to ten million and three to five million units, respectively, the first year. Shampoos have provided one of the major container corrosion problems in the past and some authorities think aerosol shampoos may still be limited to field trials in 1954.

Sales forecasts for aerosol products in metal containers only are bright, too. Take shave creams, for example. Introduced only three years ago by Carter Products Co. whose "Rise" shave cream became the first aerosol-dispensed shaving aid, they caught the fancy of the male segment of the market sufficiently to sell an estimated 35 million packages last year. With at least 25 manufacturers or marketers now competing in the aerosol shave field, the industry predicts 1954 sales will certainly be up 35 per cent over 1953 and may run between 50 and 60 million units—about 30 to 35 per cent of the total market for shaving soap preparations.

Sun tan preparations, which were sold in about one and a half million aerosol packages last year, may add another two to two and a half million units to the 1954 aerosol sales picture. Hair net sprays, which apparently will continue to be packaged in metal aerosol containers, reached a total of more than 13 million (3½ to 11-ounce size) last year. Their 1954 potential is estimated at 15 to 16 million units.

Forecasts like those are typical of the booming, confident aerosol industry. Anything that can be dispensed as a spray, foam, or powder might be adapted to the self-spraying aerosol package. Many feel the industry, despite its phenomenal growth in less than eight years, has barely scratched the surface of potential applications.

Like any growing industry, the pressurized product field has its problems. Satisfactory components of the package are only a part of the picture.

Prices of Aerosol Packed Cosmetics Higher

Prices of the finished product are a big key to rate of growth in the aerosol cosmetic market. Packaging costs, of course, are higher with aerosol products than with conventional canned, bottled, or dry-packed powder or liquid cosmetics. That must be reflected in a higher selling price—how much extra the consumer will pay for the convenience of the self-spraying aerosol package is a big question mark.

Some large national merchandisers feel the top price of a cosmetic item for mass appeal to the feminine market must be around 98 cents. It's doubtful that many aerosol cosmetic items could be economically priced that low, at present production rates. On the other hand, many merchandisers point to a psychological factor against such a low price. In the cosmetic line, they maintain, women are accustomed to paying more than a dollar for such items, and a price under a dollar might lead them to consider the aerosol product a "cheap" imitation of a good product.

Problems like that are a "dime a dozen" in the burgeoning aerosol cosmetic field, just as they have been in other phases of the cosmetics industry.

One thing's certain, however. Cosmetic producers are considering the aerosol package with much more than idle interest. Aerosol cosmetics, they think, can be the "big news" of 1954.

If two products are marketed in a single package the manufacturer cannot advertise that one is being given away free, according to a ruling of the Federal Trade Commission.

The world is in a state of ferment but no one can tell whether the result will be champagne or vinegar. —*Grit.*

If you want to test your memory try to recall the things that worried you last Monday.—*Phoenix Flame.*

J. S. SHUKLA:*

Manufacturing Vanishing Cream

Factors to consider in formulation and points on the process of manufacturing particularly in warmer climates

THE most common item in the long and ever-increasing chain of cosmetics, which is popular both with men and women, is the vanishing cream. In U. S. A. perhaps it is customary to call this product vanishing cream while in the U. K. it is generally known as snow. In India both the terms are used. The name signifies its nature as it completely melts away and vanishes when applied and gently rubbed on the skin. Men generally use it for cooling and antiseptic effect after shave. Women frequently use snow for perfuming the body and also before powdering the face. During its use it subconsciously acts as a pleasant medium for massaging the muscles of the face and limbs. Besides, a cosmetic vanishing cream is fast coming in wide use in pharmacy as a vehicle for many drugs for external application.

Although the composition of snow is simple, its manufacture is based on the well-known scientific theory of emulsification. Snow like a majority of modern cosmetics is an emulsion. This incidentally presses the need of the services of properly qualified persons for a healthy and sound growth of this industry. It is no longer possible to proceed with the aid of a book of formulae. This comment is made with due deference to such formulators and respectful acknowledgement of the progress made by empiric approach. Practical emulsion technology itself had its beginning in patient trial and error and many of the popular and most aesthetically acceptable brands in use today are simple formulations hit upon many years ago. Snow is an oil-in-water type emulsion of stearic acid and water, stearic acid being in interior or the dispersed phase and water the externay or the continuous phase. Inclusion of soap in the composition of snow is in the capacity of an emulsifier only. Not only soap but any emulsifier, which forms colloidal solution with water and thus is capable of producing this particular type of emulsion, may be used. Gums tragacanth and arabic, gelatin, K- Na-, and ammonium soaps and triethanolamine may be mentioned as emulsifying agents belonging to this class. Other factors in the manufacture of snow such as consistency, viscosity, stability, dispersibility and the finish of the resulting emulsion, however, must be taken into account when making a choice of the emulsifier. Potassium and sometimes a little sodium soap and triethanolamine, either alone or a mixture of the two, are classic emulsifiers used in the production of vanishing cream. Other substances such as borax, glycerine, titanium dioxide, alcohol etc. are introduced into the composition for imparting special properties. Distilled water and high purity of stearic acid conduce a final product.

Tests for a Good Snow

A good snow should possess pearly sheen, medium thin consistency and easy dispersibility. It should be non-soapy when rubbed on the skin and should not irritate even the tenderest skin. It should vanish quickly without leaving any residue or oiliness. It must produce a cooling sensation when applied and should leave the skin soft and pleasantly perfumed. A good snow should not dry and shrink in the container till it is used up. Approximate analyses indicating the general constituents of some of the popular brands in the market are given for reference on the next page.

The cooling effect produced by a vanishing cream is an intrinsic property of this type of emulsion. Water, being the outer phase and in such a high percentage, evaporates quickly and easily utilising the body heat to impart a cooling sensation. While this high percentage of water is essential in a good snow its consequent

*Bombay, India. Reprinted from the Indian Soap Journal. Vol. 19 P 74, September 1953.

Brand	Moisture and Volatile matter % @ 100 - 105°C.	Total Alkali (as KOH)	Total F. A.	Glycerine
A	72	1.7	20	5
B	75	1.5	18	2.3
C	74	1.2	19	—
D	80	1.1	16	2
E	75	0.6	17	2

drying out and shrinkage in the container has been a baffling problem particularly in the tropical countries. Various solid and liquid agents such as glycerine, titanium dioxide and fatty alcohols have been recommended from time to time to inhibit the tendency but without any notable success. Mechanical devices to check evaporation of water are coming in vogue. It has been observed that a correct and well-balanced proportion of total and free stearic acid incorporated in the composition of the snow by proper technique of manufacture greatly reduces this tendency. However, sudden and wide variation in temperature in the tropics affects the emulsion and cuts down its life significantly. Hence it is always a safe and sound policy to adjust the volume of production to sales so that stocks don't accumulate.

The nature of sheen which develops in course of time, the vanishing properties, dispersibility and the consistency of the finished product are determined firstly by the nature of the emulsifier and secondly again by the percentage of free stearic acid in the total fatty acids present in a sample. It has also been observed that different agents such as potassium carbonate and potassium hydroxide yielding the same emulsifier specifically affect the sheen and the time of its development. Triethanolamine gives comparatively thin consistency and easy dispersibility to the product. Some makers partly replace the potassium salt with sodium salt to reduce the soapiness and to improve the vanishing properties of the snow. This although, workable in a fresh sample, impairs the keeping qualities and should be avoided in a high-class product.

Stearic Acid (m.p. 56 - 80°)	50	40	40	40 lbs.
Pot. hydroxide	3	0.8	—	0.8 ,,
Pot. carbonate	—	0.7	—	— ,,
Triethanolamine	—	—	1.8	0.8 ,,
Borax — — —	1	—	—	— ,,
Glycerine — —	5	4	1.0	— ,,
Dist. water— —	220	160	160	165 ,,
Perfume	0.6	0.6	0.6	0.6 ,,

A good vanishing cream may be composed of 75-80% water, 16-25% total stearic acid of which 13.30% may be saponified to act as emulsifier, 1 –2.5% glycerine, 0.5-1% borax and about 0.5% perfume. A perfume blend for snow should not contain, essential oils or chemicals which would dull the whiteness and produce irritation to the skin. The blend does not need heavy and strong fixatives, as the water itself serves the purpose well. Some workable formulae are given at the bottom of the left column for reference.

Process of Manufacture

Stearic acid and water are heated separately and raised to a temperature of about 75° C. In case potassium carbonate forms a part of the alkali the temperature of water is raised higher to about 90° C. The alkali is added to a part of the water and well stirred. The remainder of the total quantity of water is kept aside to be added later one. A part of the glycerine is also added to the bulk of water previously heated. Melted stearic acid is then slowly added to the alkaline solution and the mass well stirred. In some cases, depending upon the formula selected, the mass thickens as soon as all the stearic acid is added. Heating should be stopped as the mass thickens and the whole well stirred till cold. In other cases, when the mass does not become thick even after all the stearic acid has been added, it is heated in liquid form for about 15 minutes when all the carbon dioxide, if any, is given out. Heating is then stopped and the stirring is continued. As it cools down the emulsion gains body and becomes thick. It is then left for a few days. The remaining water containing glycerine is then stirred in and the mass left to mature for at least 15 days when it is perfumed and strained through fine muslin and bottled.

The use of machine and power is not essential for the production of snow emulsion. It is on the other hand, a disadvantage with certain emulsifiers. Steam and water jacketed stainless steel cylindrical pans and manpower for stirring are sufficient to produce a high class product.

Cosmetic Excise Tax Collections

Cosmetic excise tax collections in 1952 and 1953, and also in January, 1954 are given in the following table:

	1954	*1953*	*1952*
January	$ 8,147,000	$13,123,480	$11,547,853
February		13,859,961	14,338,420
March		7,805,077	7,248,879
April		9,236,101	8,218,865
May		9,286,470	9,174,622
June		8,875,000	8,253,649
July		9,996,000	9,357,443
August		5,964,000	8,849,488
September		370,000	8,523,241
October		8,204,000	8,439,370
November		19,912,000	7,878,976
December		536,000	10,432,117

It may be noted that cosmetic tax collections beginning with September, 1953 appear to follow an irregular course. This is due to the change in the system for collecting these taxes on a quarterly instead of on a monthly basis.

Vacuum still for separating various components of essential oils.

Concluding installment of an analysis of developments in 1953 . . . Essential oils from various sources . . . Terpenes . . . Sesquiterpenes

PAUL Z. BEDOUKIAN, Ph.D.*
Author of
Perfumery Synthetics and Isolates

Progress in Perfumery Materials III

THE camphor tree which formerly was the basis of much of the aromatics industry in Japan, has been described in full—its subspecies, varieties and subvarieties. The properties of the leaf oil of each have also been noted.[194] The oils from the East linalool tree,[195] the East safrole tree,[196] the East cineole tree[197] and the East sesquiterpene tree[198] were examined and a detailed report of their composition was made.

Investigation of the high-boiling components of Formosan citronella oil showed the presence of d-citronellic acid and cymbopol, along with other constituents.[199] A comparison has been made of the essential oil of Taiwania cedar and Cryptomeria japonica.[200] The alcohol fractions were similar but there was considerable variation in the sesquiterpene fractions. A study of the oil obtained from Japanese cinnamon (Cinnamomum loureiri indicated that the oil was equal in quality to cinnamon oil from Cinnamonum cassia.[201] The acidic constituents of the essential oil were found to consist mainly of carvacrol, alpha thujaplicin, l-rhodinic acid and hinokitiol.[201a] The essential oil of magnolia salicifolia consisted of 73% anethole along with other constituents.[202] The essential oil from the trunk of litsea cubeba consisted of 60% citronellal[203] while the leaves contained 80% cineol along with other constituents.[204] Another publication reports on a study made on the composition of the essential oil of Orthodon methylchavicoliferum.[205]

The properties of two essential oils obtained from Achillea micrantha[206] and Salvia triloba[207] from Turkish sources were given.

Reports on Essential Oils from European Sources

An extensive study was made of the production of lavender and lavandin in France.[208] North Africa is becoming increasingly important as a source of valuable essential oils, and understandably so, since the cultivation and distillation of plants is being carried out under the supervision of experienced persons from France. Moroccan oils such as neroli, geranium, peppermint, Atlas cedarwood, camomile and others have been analyzed.[209] The essential oil of Homalemona rubescens[210] was found to possess a coriander type of odor and consisted of 75% linalool.[211] The oil of Ridolfia segetum is reported to contain 55% d-alpha phellandrene and 33% myristicin.[212]

Other articles describe the cultivation, distillation and properties of the oil from mentha piperita as obtained in France and Italy.[213, 214, 215] The essential oil of Ruta chalepensis grown in Portugal was found to consist prin-

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cipally of methyl nonyl ketone.[216] The oil of Mentha pulegium growing wild in Portugal contained over 83% pulegone together with some menthone and beta caryophyllene.[217]

Detailed data have been published on the bergamot crops of the past two years in Italy.[218] The characteristics of the oil of Juniperus communis obtained from plants at various altitudes were reported in another Italian publication.[220]

From Germany come reports on the examination of the oils from Citrus trifloliata,[221] Robinia pseudacacia[222] and Artemisia absinthum.[223] The cedar oil from Spanish Moroccan trees was shown to be rich in cedrol whereas the oil from the leaves consisted primarily of d-limonene.[224] Many varieties of herbs are cultivated in government plantations in Poland and a report was made on the oil obtained from Thymus.[225] A large number of constituents of pine flotation oil from Pinus sylvestris were identified in a Russian publication.[226]

Essential Oils Obtained from Other Localities

Rosewood, Brazil's most important oil, has been reviewed with respect to its production, analysis and yields.[227] Another review discusses Brazilian cabreuva oil, a very important source of nerolidol, and the manufacture of farnesol.[228] Large quantities of vetivert oil (Vetiveria zizanioides) are produced in Brazil; conditions for its production are given in a lengthy article.[229] The oil of Mentha pulegium from Brazilian grown plants contained only 9% pulegone as compared with 16-30% from American oil and 80-90% from European plants.[230] A critical study has been made of the composition of the Brazilian oil of Louro Inhamuy.[231]

Important quantities of essential oils are being produced in the Belgian Congo. The yields, distillation, composition and properties of rose geranium and vetivert oils, and the production of citrus oils, have been described at some length.[232] The changes which occur during storage of essential oils, e.g. rose geranium six years old, lemongrass, peppermint and eucalyptus aged over lesser periods, have been examined.[233] The properties of the essential oil of Ocimum canum[234] and Micromeria abyssinica B.[235] grown in East Africa have been published in a French perfumery journal.

Pyknometer for finding alcohol content

Examination of coriander oil from the ripe fruit of Coriandrum sativum revealed that it contained 49% coriandrol, of which part is in the form of esters.[236] The plant grown in the West, when distilled in its entirety, gives an oil similar to the commercial coriander oil.[237] The chemical composition of gum turpentine oils from Durango has been reported in a recent publication.[238] A Canadian publication gives the chemical composition of the oil from Abies balsamica.[239]

The oil obtained from a new physiological form of Backhousia citriodora found in Queensland is reported to contain 62-80% of l-citronellal.[240] Several Australian oils listed, including the Huon pine oil, leaf oils of Backhousia myrtifolia, Zieria smithii, and Melaleuca bracteata, were shown to be as effective in insecticides as methyl phthalate. This property is attributed to the presence of phenol ethers in these oils.[241]

A review has been published on the production of English essential oils: peppermint, lavender, clary sage, chamomile and dill.[242]

Research in Terpenes

Considerable research has been done in the past year of both academic and practical value. Some of the more important phases of research in terpene materials will be mentioned below. A new synthesis of lavandulol has been reported by two workers. They synthesized lavandulols having both the limonene and terpinolene structure, as well as the cyclization product, cyclolavandulol.[243] Lavandulol was also synthesized by other experimenters who obtained it by the reduction of ethyl lavandulate.[244] These authors reported the infrared spectra of both the natural and synthetic lavandulol. They also oxidized gamma cyclolavandulol with aluminum isoproylate and obtained beta-cyclolavandulal. This on condensation with acetone gave the lavandulidene acetone, a product related to ionones. Numerous other derivatives of cyclolavandulol were reported by the same workers.[245] It is interesting to note that pseudoionone lacking the methyl group in the six position, will not undergo cyclization, indicating the importance of this configuration in the cyclization of terpenes.[246] A synthesis of allocyclogeranic acid has been reported.[247]

A study was made of the thermal decomposition products of l-menthyl acetate. The resultant p-menthenes were subjected to a thorough investigation.[248] The same reaction was studied by other workers.[249] The configuration of piperitols obtained by the lithium aluminum hydride reduction of piperitone was the topic of another paper.[250]

On boiling ascaridole in xylene for six hours, the glycol anhydride is formed along with a number of other products.[251] dl-Camphene has been converted to camphenilancarboxaldehyde and this in turn reduced to two stereoisomeric isocamphanols. The configuration of the latter was investigated.[252] It is interesting to note that camphor and benzyl alcohol form hemiacetal at low temperatures.[253]

Dihydrobicyclic terpenes are obtained by passing limonene over certain catalysts at elevated temperatures.[254] On the other hand, by controlling the experimental conditions, a wide range of terpenes can be formed from limonene.[255] Similar experiments have been carried out with pinene, alpha terpineol and 1,8-terpin hydrate.[256] A complete synthesis of alpha ter-

PAUL Z. BEDOUKIAN, Ph.D., chief chemist for Faberge, Inc., and author of Perfumery Synthetics and Isolates, has written another of his annual reviews of progress in perfumery materials for The American Perfumer.

pinene has been accomplished.[257] The configuration of isocamphenilanol has been studied.[258]

The action of chlorine on beta fenchene and the structure and transformations of camphene dichloride were reported in another publication.[259] Similar studies on alpha fenchene and alpha pinene were carried out by the same workers.[260, 261] It was found that the chloroterpenes form Grignard compounds and can be employed in various Grignard syntheses.[262] Attempts at asymetric synthesis have been made by using the Grignard compound of various terpene hydrochlorides.[263]

The formation of pinene peroxide by the use of metallic oxides has been described. Decomposition of the peroxide gave verbenone and verbenol.[264] Tert butyl chromate was used to oxidize terpenes at room temperature. Thus, pinene gave 26% verbenone on reacting in acetic acid solution for fifteen days.[265] The various steps involved in the oxidative degradation of pinene are illustrated in another paper.[266]

The decomposition products of 2,6-dimethyl-5-hepten-2-ol have been studied in detail.[267] Alloocimene was reduced to dihydroocimene which was then hydrated to 2,6-dimethylocten-5-2-ol.[268] Reduction of ascaridole with lithium aluminum hydride gave a product which has been identified as cis-p-1,4-menthenediol.[269]

Sesquiterpenes

Sesquilavandulol has been synthesized and its alcohol cyclized with formic acid to give bicyclosesquilavandulol.[270] Sesquilavdulylic acid, its cyclic product, and the alcohol have also been prepared.[271] In continuation of this work, 5-methylcyclolavandulal and its condensation product with acetone have been obtained.[272]

Some tricyclic derivatives of caryophyllene have been prepared and their reactions studied.[273] Additional proof of the nine-membered structure of beta caryophyllene has been supplied.[273a] Caryophyllene, humulene, and other sesquiterpenes have been isolated from the essential oil of Dipterocarpus indicus.[274] An azulenic skeletal structure has been assigned to a sesquiterpene isolated from the oil of Lansium annamalayanum.[275] Various sesquiterpenes have been isolated from the oil of Matricaria chamomilla and subjected to investigation.[276]

The unusual formulas of D & E have been suggested for humulene as a result of extensive studies on this sesquiterpene.[277] Other workers advanced the structure F for humulene.[278] On the basis of infrared spectra analysis, a structure has been proposed for the sesquiterpene calamenene.[279] Following investigations on the reactions of bisabolol and its oxide, a structure has been suggested for this compound.[280] Other research along these lines includes: identification of the sesquiterpene fractions of oil of Populus balsamifera,[281] study of the sesquiterpenes of ylang-ylang oil,[282] isolation and study of the sesquiterpene hydrocarbons of sweet-flag oil,[283] the sesquiterpene components of wormwood oil[284] and ginger oil.[285] There are also reports on the sesquiterpenes obtained from Piper cubeba oil.[286, 287]

Cyclization experiments on farnesylic, dihydro-alpha-ionylideneacetic and dihydro-beta-ionylideneacetic acids, have shown that the method of preparation of the starting materials influences the cyclization results.[288] Ethyl (1-hydroxyfarnesyl) acetate has been prepared and cyclized with formic acid. On the basis of certain studies, a structure has been proposed for the resulting bicyclic lactone.[289]

A lengthy review article on the developments in the chemistry of sesquiterpene chemistry through the year 1951 has appeared in a Russian publication.[290]

Books

As in previous years, the literature includes a number of books of interest to the perfume industry:

Die Moderne Parfumerie[291] by F. Winter. This is the sixth and revised edition of this well-known book.

Internationaler Kodex der Atherischen Ole[292] by A. Muller. It is similar to the companion book on Perfumery Aromatics and contains much useful material on essential oils.

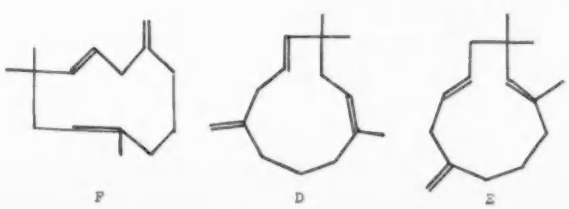
Atherische Ole[293] by R. Leimbach and K. Bournot—the second edition of a useful and concise book on essential oils.

Laboratory Book for the Perfume Industry[294] by O. Simon—fifth edition, a short treatise for the analyst.

Formulary of Perfumery and of Cosmetology[295] by R. M. Gatefosse. This is the first English translation of the third edition of this book by the well-known French authority on the subject.

Basic Odor Research Correlation[296]—Vol. 58, Art. 2. of the New York Academy of Sciences. Up-to-date presentation of the problems and nature of odor by thirty-four specialists.

This is the writer's tenth annual review on progress in perfumery materials.[297]



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If you don't see them, you can't tell them. If you don't tell them, you can't sell them.—*Donald M. Pattison.*

Formosa—Source of Essential Oils

A PRIMITIVE manufacturing plant in Taiwan, Formosa, using a simple process, nonetheless can boast efficiency in making citronella oil and a yield of two by-products. The essential oil is obtained by distillation from grass called *Cymbopogan Winterianus*, Jowitt, which is cultivated along the hillsides in the central part of the island. Meteorological conditions exert great influence on the grass's growth, with moderate altitudes (1150 feet above sea level) and plentiful sunlight giving optimum growth. Good yields occur after two or three years, and replanting is done after seven or eight years. The grass, about 4 feet high, is harvested twice a year, in July and August and from December to February.

Yield is about 2.5 per cent of the sun-dried grass, and amounts to 50 to 70 kilograms per hectare. Processed grass may be used as boiler fuel or in making paperboard. Distilleries contain cylindrical wooden stills about 7 feet high and 4 feet in diameter which are mounted on bricks under a bamboo roof. A bamboo pipe from the still leads to the condensing coil and then to a separator where citronella oil is separated from water by the difference in densities. Oil consists mainly of citronellal and geraniol, which are used as aromatics in soap and perfume and as raw material for manufacture of synthetic menthol, hydroxy-citronella, and other esters. Production of the crude oil in 1953 was about 4.5 million pounds, a new high since 1945.

Lowering synthetic camphor prices in the world market has stimulated higher production goals of refined natural camphor in Formosa. The government has established 1954 goals at a little over 600,000 pounds of refined natural camphor and about 530,000 pounds of by-products. Production rate for refined camphor in 1953 amounted to over 575,000 pounds. The six camphor by-products in which production is substantial in Formosa are white oil, brown oil, ho oil, blue oil, terpincol, and pitch.—*Chemical and Engineering News.*

Nose Conscious Merchants

PLACEMENT specialist Walter A. Lowen tells us that America's merchants are getting more and more nose-conscious in an effort to step up sales. Now, Mr. Lowen says, you can buy shower curtains perfumed to send forth a pleasant odor when wet. Dainty stenographers may now use perfumed typewriter ribbons, and even aromatic pencils. To top it off, used-car dealers have discovered how to make elderly automobiles more attractive to buyers. They just spray the insides with a liquid that gives off the odor of a *new* car!

Basic Research

IF every company which now has no basic research program would allocate a modest sum for a central research program, and if every company now spending money for basic research in its own labs would turn over part of the money to an industry-sponsored program, fundamental problems which have been pushed into the background could be tackled and solved.—*Cary R. Wagner.*

The Executive Committee composed of Mark K. Dresen, Townsend and Robert Cox and Walter Rowan critically examine a large tube.

Fourth generation of family now in management of pioneer collapsible tube manufacturing company

Another A. H. Wirz Inc. Milestone

ANOTHER milestone in the long and interesting history of the pioneer collapsible tube manufacturing company of the United States, A. H. Wirz Inc., Chester, Pa., took place January 1 of this year when H. Saulmir Darlington retired as president after 39 years of service with the company; and Mark K. Dresden became president and took over the direction of the company's destinies. At the same time members of the fourth generation of the Wirz family came into the picture as officers: Townsend C. Cox Jr. and Robert F. Cox as vice presidents and H. Walter Rowan as treasurer. Management of the company is in the hands of an executive committee comprised of Mr. Dresden, Townsend and Robert Cox and Walter Rowan. Mrs. Annie T. Wirz continues as vice president and Mrs. M. H. Paul as secretary. Mr. Darlington who has retired will serve as chairman of the board of directors.

Mr. Cox selects a tube from one of the display cabinets to illustrate and emphasize a point raised in a discussion.

The new president, Mark K. Dresden, has had an interesting career. He was born in Madison, Wisc. where his father Dr. Arnold Dresden for 18 years taught mathematics at the University of Wisconsin. It was at the University of Wisconsin High School that he obtained his secondary education, completing it at the George School in Bucks County, Pa. after his father had been made chairman of the department of mathematics and astronomy in Swathmore College. Young Mr. Dresden then entered Swathmore College where he was on the football squad. In December 1930 he married Miss Alice Williamson.

He then obtained his first job with the Scott Paper Co. of Chester, working in the factory until 1933 when he secured a position in a cigar store in Philadelphia at a salary of $18 per week which was soon raised to $22. While the pay was small Mr. Dresden feels that he gained much from this experience in retail selling which has proved to be valuable in his later sales work for Wirz. While he was engaged in retailing in the day time, he spent his evenings studying accounting as many other successful men have done through a correspondence school. Curiously that study led directly to the path which took him to the presidency because at the time A. H. Wirz Inc. needed an accountant. So he joined A. H. Wirz, Inc. in November 1934. After spending one month working in the metal preparation department he began cost accounting work under Fred

An Informal Conference on sales promotion with David Ullman of the Roland G. E. Ullman Organization and the Executive Committee.

A. Bodie who retired in March 1936. The late Joseph B. Blakiston was then treasurer and sales manager; and, following his untimely death in 1938, Mr. Dresden who had served as assistant treasurer was put in charge of all accounting and also began devoting more of his time to sales. In May 1951 he was elected vice president and treasurer and at the same time Townsend Cox Jr. was made assistant treasurer and Robert Cox was made assistant secretary. This arrangement continued until January 1 of this year.

The company of which Mr. Dresden is now head is not only the pioneer collapsible tube manufacturing company in America it is also one of the oldest concerns in the country. In the industrial boom that followed the opening of the Erie canal and the importation of the first steam locomotive into the United States, a business was founded in Philadelphia which has developed into one of the foremost collapsible tube manufacturing companies in the world. In 1836 Martin Kuemerle, a native of Knittninger, Germany, founded a surgical instrument and white metal specialties business in Philadelphia. A little prior to that time August Herman Wirz was born in Zurich, Switzerland. After his parents took him to Vevey all trace of him was lost until 1854 when his name appeared in the Philadelphia directory as an importer of French goods. In 1857 Mr. Wirz married Mr. Kuemerle's daughter and joined his father-in-law's company. In 1861 Mr. Kuemerle retired leaving the business in the hands of Mr. Wirz.

Then in 1870 when Mr. Wirz was U. S. Commissioner to the industrial exposition in Vienna he examined collapsible tubes and saw how they were made. Sensing the possibilities of the new tubes, Mr. Wirz, accompanied by a German tool maker, brought back to this country plans for collapsible tube machinery; and that year the manufacture of collapsible tubes was begun in a building at 111 S. Eighth St. Philadelphia. The business grew and in 1876 the company moved to 917 Cherry St. where it continued to manufacture surgical instruments, collapsible tubes, sprinkler tops, collapsible cups and other metal specialties. Gradually the surgical instrument business was supplanted by other lines and in 1885 the company concentrated on collapsible tubes and sprinkler tops.

Henry M. Wirz, grandson of the founder, who was born in 1859, entered the business in 1882 and became head of the company when his father died in 1886. When Henry M. Wirz died in 1909 he was succeeded by his son A. Herman Wirz. Under the latter's management the collapsible tube business became of primary importance and in 1914 the plant was moved into its new building in Chester, Pa. The same year the company was incorporated. In 1915 the first decorated collapsible tubes were made. The company thrived and a second building was added in 1918 and a third in 1928. A. Herman Wirz died in 1929 and was succeeded by H. S. Darlington as president. In the 39 years that Mr. Darlington has served the company nearly complete mechanization of tube manufacturing has been achieved and plastic compression molding was begun in 1942. Since then injection molding has ben added for moldng small pieces such as applicators etc. Because of the increasing sales in the mid western area a branch plant was established in Carrollton, Kentucky close to Louisville, Cincinnati and other large midwestern cities. The company has also done considerable research on aerosols. All told the plant at Chester has been extensively modernized with automatic drying and conveying systems. The method of inspection has been revamped and a quality control department has been established which attempts to look at the quality of the products turned out through the eyes of consumers. Statistical quality control methods are employed. Relations with employees are a notable factor in the success of the company over the years. The company has an impressive list of long term employees who are presented with service awards and who benefit from a profit sharing plan which the company maintains. An instance of the feeling that each one is a part of the organization was furnished when Charles Hax, who was told at the end of 1953 that he should retire after 71 years of service with the company, commented "When I was hired by August H. Wirz I was

told and led to believe that this was a permanent position." It was the only place he had ever worked and to him it was like home. As he is in his eighties he gracefully retired and was honored on the occasion by the management.

As to the future Mr. Dresden is optimistic. With a new branch factory in Kentucky and five branch offices strategically located in the United States and Cuba he feels that the company is well equipped to continue the service that has always been associated with the company.

Mr. Dresden's chief hobby is business itself. His secondary hobbies are found in attempting to play golf and in hunting deer and small game. He lives near Media and has two sons and a daughter. His older son Kenyon is a senior in Colgate University and his younger son Charles is a paratrooper in Japan. His daughter Alice is a student in high school. Mr. Dresden also finds time for civic work. He served as president of the Delaware County Manufacturers Assn. for five years. He was chairman of the Wm. Penn District of Boy Scouts; is a director of the Pennsylvania Manufacturers Association; is vice president of the Board of Managers of the Chester Hospital where he has served for ten years and he is a member of the Coast Guard Auxiliary. Also he was appointed by Gov. Edward Martin, now senator, a member of the Board of Public Assistance.

Package Limitations

AS a manufacturer of packaged products, you have probably discovered that everybody knows something about packaging.

Friends will neglect their businesses to tell you how to package your product. Package Design Specialists you never heard of will voluntarily explain what is wrong with any packaging effort you may make. Packaging publications will point out wonderful sales increases directly traceable, of course, to an improved container, or label, or closure.

It isn't likely that you lack advice. Nothing daunted we hasten to add our own:

"Base your package design on something more substantial than enthusiasm. Be practical. Don't use trick containers. Keep your package as honest in appearance as it is honest in contents.

"Believe in your package, but respect its limitations. A package cannot improve the quality of your product. Nor will it in any way make up for incompetent sales organization, poor distribution, careless service, or lack of advertising. Those things you must provide yourself.

"An improved package will increase sales . . . yes! But only when aided by every other contributing factor."—*Phoenix Flame.*

There is no dentifrice on the market that can stop all cavities but 60 per cent of tooth cavities can be prevented by regular brushing.—*Dr. Walter B. Elyers, Bristol-Myers Co.*

People who throw dirt always lose ground.—*Houghton Line.*

How Pure is Pure?

MARK TWAIN's observation about the weather—that everybody talks about it but nobody does anything about it—applies, in a way, to chemical purity.

Everyone talks about it—in fact, one of our *oldest* chemical designations is something called "chemically pure"—but just what do the various "purities" really mean?

Keeping an eye open for heated replies. *The Laboratory* wades through the multitude of terms, suggests that *"purity" can be sorted out into six degrees as determined by the function of the chemical in the laboratory.*

NUMBER ONE degree of purity belongs to the *primary standards,* chemicals which by virtue of their high purity (a result of their inherent chemical characteristics as well as their careful preparation) can be weighed out *directly* for determining the amount of active ingredient in a solution of unknown strength, or for preparing a solution of the substance in a desired strength.

Thus, primary standards have the same function as the irido-platinum standard meter: they are, today, ultimate standards for measuring. These chemicals not only come with a lot analysis of elements, but also a lot *assay* (the percentage of the *compound* that is present) that is, at the very least, 99.95 per cent. They are available from the National Bureau of Standards, and—with NBS certification—from a few chemical firms as well.

NUMBER TWO degree of purity belongs to the several hundred chemicals called *reagents,* chemicals which meet specifications designed to permit use in quantitative and qualitative analysis. These are found in two forms—(1) *"lot analyzed" reagents,* i.e., where each individual lot is analyzed and the actual amount of impurity reported as "arsenic . . . 0.0005 per cent," and (2) *"maximum impurities" reagents,* i.e., where

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impurities appear as "arsenic . . . maximum: 0.001 per cent." (In the latter instance, the arsenic may even be 0.0004 per cent, but, of course, the analyst has no tangible figure to put his finger on other than the guaranteed limit of 0.001 per cent.)

In these two groups—the primary standard, the reagent—specifications have been prepared by the Committee on Analytical Reagents of the American Chemical Society for 187 of the most commonly used items. Establishment of these A.C.S. specifications marks the turning point in the history of chemical purity and too much praise cannot be accorded the work of the Society's tireless committee.

Manufacturers of "A.C.S." chemicals check each lot in the control laboratory and only place "A.C.S." on the labels of those lot chemicals meeting the Society's published specifications.

NUMBER THREE degree of purity is shared by the terms "highest purity" and "chemically pure." Both are —let's face it—misnomers, and should always be used with quotation marks to show that they are merely descriptive phrases adopted through the years.

"Highest purity" is a term used by manufacturers for organic chemicals they have purified to as great a degree as they find practical; the purity is usually determined by melting-points or boiling-points. Such reagents should be analyzed by the chemist prior to use in most analytical work.

"Chemically pure," once the aristocrat of all purity designations, means only that the purities present are "more or less" within reasonable limits for use as reagents. Interpretation of what this involves varies from company to company, and "C.P." chemicals should be analyzed by the chemist if he is engaged in analytical or impurity-sensitive developmental research.

Since the advent of the A.C.S. specifications, we see little reason why the term "C.P." shouldn't be quietly put to death.

NUMBER FOUR degree of purity is shared by "U.S.P." and "N.F." designations. Although some items here may be even more impurity-free than items in the higher categories, the important thing to remember is that in these categories *chemical* purity is only incidental. In other words, these terms are more concerned with whether the concentration of impurities is harmful to *life*. Thus, although the *United States Pharmacopoeia* and the *National Formulary* are invaluable (indeed, they are *legal* compendia), "U.S.P." and "N.F." should never be confused in function with "A.C.S."

NUMBER FIVE degree of purity belongs to chemicals labeled *purified* or *practical* or *"pure."* These chemicals, the workhorses of the laboratory, can be used in the synthesis of other chemicals of greater purity, but purification and analysis are called for before their use as analytical reagents, unless they are known to be free of the elements that interfere with the analysis in question. (For certain analyses where reagents are not available, NUMBER FIVE chemicals can be used if a blank is run.)

NUMBER SIX degree of purity belongs to "technical" chemicals—the highest-grade *commercial* (as opposed

to *laboratory*) chemicals. They are generally used only in manufacturing. (Note: some firms use the term "commercial" for the NUMBER SIX group.)

There are, of course, many other categories, which concern chemicals of special application—like the "potency reference standards" of the *United States Pharmacopoeia* and the *National Formulary* (to fill the time lag between the development of medically useful drugs and the perfection of methods for their chemical analysis), and the standards of the Association of Official Agricultural Chemists, the American Society for Testing Materials, and others.

What does the future hold for chemical purity? The trend—as instrumentation increases in sensitivity and speed—will be towards ever greater specification, more detailed analysis of traces. (Already, many items in the Fisher Certified Reagent line—a comprehensive line of lot-analyzed reagents—not only meet but *exceed* A.C.S. specifications.)

One East Coast research director we quizzed had an interesting things-to-come comment. "Some day," he said, "I'd like to see all chemicals in three grades—reagent, laboratory and commercial—and with a lot analysis for each. Now that *would* be a chemist's utopia!" To which we say, Amen.

Climate and Skin Diseases

BY moving to a sunny, mild climate one may often cure a chronic skin ailment, provided that the patient doesn't take his troubles with him, according to Drs. Leslie Smith and Henry Garrett dermatologists of El Paso, Texas, in an article in the American Medical Assn. Archives of Dermatology and Syphilogy.

Some cured patients give so much of the credit for their cures to climate that they lay a foundation for the development of keratoses and skin cancer by becoming sun worshipers, the doctors warn.

Actually, "change of emotional environment, more rest and relaxation, and slower tempo of life are equally important" in effecting the cure. When patients brought their major emotional difficulties with them to the sunny climes, they didn't fare so well.

Vanilla Bean Imports in 1953

SUPPLEMENTING the report in the February issue, page 100, of U. S. Imports of vanilla beans, the complete figures for 1953 are:

TOTAL FOR 1953	LBS.	DOLLARS
January	165,650	$ 423,550
February	159,469	456,286
March	230,691	734,943
April	167,205	554,895
May	63,222	207,963
June	126,491	433,649
July	125,548	447,683
August	135,793	499,352
September	168,521	666,373
October	100,317	415,749
November	119,808	493,811
December	141,704	665,886
TOTAL—	1,704,419	$6,000,140

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Modulan is chemically treated lanolin containing all the constituents of lanolin modified by a unique treatment to impart NEW and VALUABLE PROPERTIES.

Modulan forms clear solutions even in cold mineral oil and deposits hydrophobic, emollient films on skin and hair. These desirable protective films are waxy rather than tacky and are very pleasant to the touch.

Modulan is extremely hydrophobic—does not form greasy emulsions and is practically odorless. CLINICAL INVESTIGATIONS HAVE INDICATED THAT IT IS HYPO-ALLERGENIC.

Because of its solubility in mineral oil and its outstanding compatibility with oil-in-water emulsions and with soaps and shampoos, Modulan is particularly recommended for use in creams, lotions, baby products, hair preparations, make-up, and ointments.

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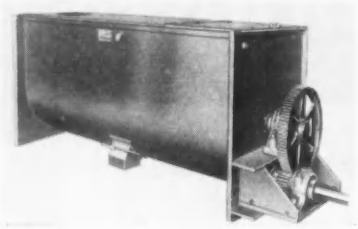


Mixer for dry and wet materials

New Industrial Mixer

A new industrial mixer designed to handle both heavy dry and wet materials is available for immediate shipment in the ton and ton and a half sizes for use in soap, pharmaceutical and other plants where a heavy duty mixer is required, is announced by Rapids Machinery Co. The mixing action is due to the continuous scooping, sweeping action of the patented mixer arms and blades so spaced that they assure every particle of material will be included in the mix. A 2-ton industrial mixer is also available for mixing heavy dry material.

Colloid Mills

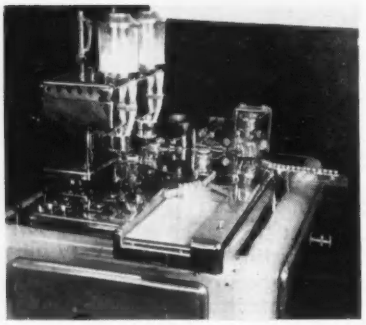
The new mixing, dispersing, emulsifying and homogenizing device known as the ultra turrax colloid mill, manufactured in West Germany by Janke & Kunkel is sold exclusively in the United States by the Chemical Products Div. of Cartrite International, Inc. The efficiency of the new device is said to be due to the complex action of hitherto unknown high frequency shock and impact effects as well as the cavitation produced in the supersonic frequency range by the simultaneous action of high frequency hydrodynamic potential gradients and effect turbulence occuring inside the vortex chamber of the colloid mill itself.

Folding Trucks

Folding trucks which collapse flat and are easy to carry in any car for the use of salesmen, servicemen and others are offered by the Federal Cash Register Co. Although the trucks were developed for sales and service the company states that they are equally popular and useful for offices, factories, sales floors, etc.

Filling and Packing Machines

A new line of German-made semi-automatic and automatic filling and packing machines and a line of automatic cartoning, check weighing, stoppering and sealing machines has been added to the line of machines handled in this country by Alfred Hofmann & Co. The new machines are manufactured by Hofliger & Karg in Western Germany. Full details about the interesting new developments in the foregoing machines will be supplied on request.



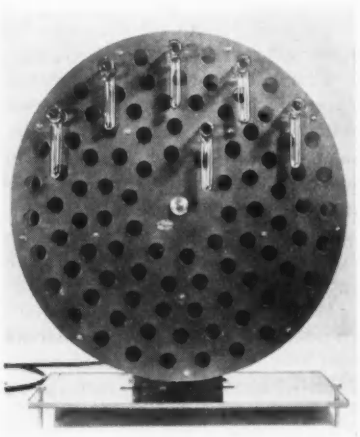
Filler

Non-Free-Flowing Materials

The solution of the problem of feeding non-free-flowing materials may be had by the employment of the Com-Bin Feeder, according to the Pulva Corp. It is able to satisfactorily handle a wide range of difficult to feed materials, the company states. Free testing service is offered and rental units are offered.

Roller Tube Cultures

A compact new rotor unit for roller tube cultures is offered by Microchemical Specialties Co. The driving mechanism is integral with the rotor supports and indexes the reel at one revolution per six minutes. The reel holds 94 culture tubes in five concentric circles. It is pointed out that the unit provides the advantage over usual methods of accommodating larger tissue mass; allows easy medium studies and permits radioassay of tracers through the culture tube.



Roller unit for tube cultures

Processing Literature

Weights and measures case reference book through July 1952 court decisions, is the subject of circular 540 of the National Bureau of Standards. It contains 97 pages and is bound in buckram. Copies are sold by the Government Printing Office for $1.25.

The danger of flash fires where chemicals are used as solvents and its elimination are covered in a leaflet issued by Paul O. Abbe Inc. What causes static fires, grounding the worker and the effect of humidification are discussed.

Liquid processing equipment made by the Alsop Engineering Corp., Milldale, Conn., is fully described and illustrated in a new 32 page catalog which may be had for the asking. It describes the company's entire line of stainless steel filters, mixers, tanks and pumps. The catalog also explains the service of the company's engineering staff in designing special units which might be required to fit the customer's specific job.

The flame resistant hydraulic fluid, Lindol HF, promotes plant safety and personnel morale according to the makers Celanese Corp. of America. The product is described in an 8-page leaflet.

SHULTON

...the world's largest producer of Heliotropine

. . . is also producing other fine chemicals by new techniques, including:

- Eugenol USP
- Benzyl Alcohol NF
- Iso Eugenol
- Benzyl Benzoate USP
- Rhodinol Shulton

. . . and from Shulton research, these completely new products for use in the aromatics and flavoring industries:

Vanitrope (propenyl guaethol)
Geranic Ether • Floralizer No. 12
Heliotropine Liquid

Samples and price schedules available on request.

SHULTON, Inc.

FINE CHEMICALS DIVISION • 630 FIFTH AVENUE
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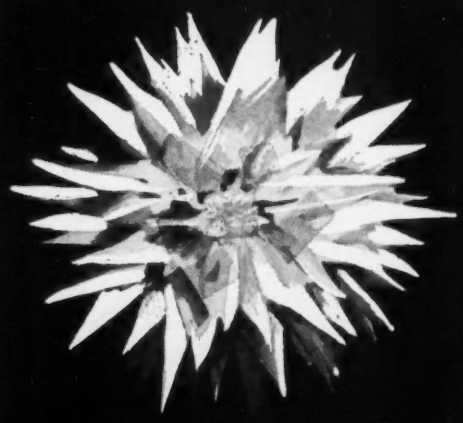
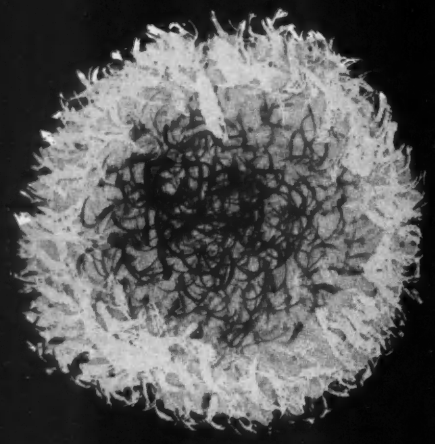
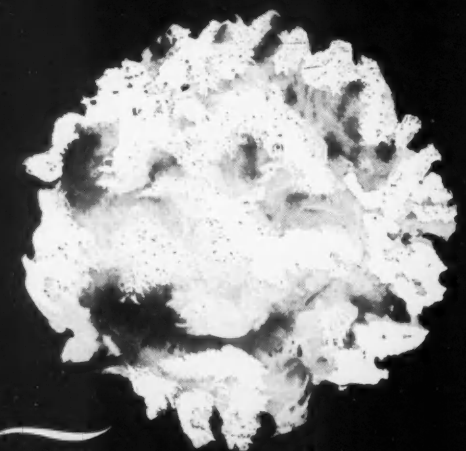
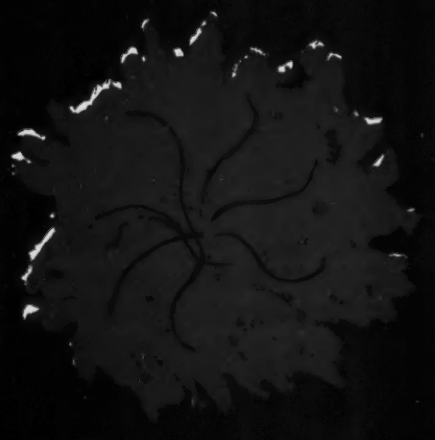


BOUQUET 1954 ..... by Florasynth



...as *modern* as tomorrow ...as *practical* as today!





Florasynth LABORATORIES, INC.

NEW YORK 22 • CHICAGO 6 • LOS ANGELES 21

CINCINNATI 2 • DETROIT • DALLAS • MEMPHIS • NEW ORLEANS 12

ST. LOUIS 3 • SAN FRANCISCO • SAN BERNARDINO

FLORASYNTH LTDA. (Canada Ltd.) • MONTREAL • TORONTO • VANCOUVER • WINNIPEG

PRODUCTOS Y LABORATORIOS FLORASYNTH S. A. MEXICO 11, D. F.

The latest creation of Florasynth for those progressive manufacturers seeking fresh meaning and new loveliness in their perfumes, cosmetics and cosmetic products.

New Products and Developments

Reducing Heat and Sun Glare

The use of No-Glare on skylights and windows shuts out glare, keeps plants cooler and admits 91 per cent of natural light according to The Skybryte Co. Summer heat, it is claimed, is reduced 15 per cent. It is available in light blue, light green or white and is applied by spraying or brushing on and is said to stay on from season to season, and may be removed with hot water and a stiff brush.

Free Loan 16 mm Sound Films

A list of free loan 16 mm. sound films has been compiled by the Princeton Film Center Inc., Princeton, N.J. Many are in color. The motion pictures are suited for clubs, colleges and industrial audiences. A wide range of subject matter offers timely and interesting program material. Requests from users could be sent directly to the Princeton Film Center.

Cap with Polyethylene Liner

A patented, plastic screw cap with a polyethylene cone liner for glass, metal or plastic containers is offered by the Poly Seal Corp. It is designed to eliminate troublesome leakage, evaporation, contamination, binding and back-off.

Pin-Needle Extract from Gastein

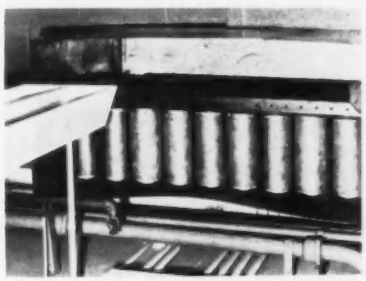
Pine needle extract from the abundant pine trees of the area of the famous spa of Bad Gastein, in the heart of the Austrian Alps, is imported into the United States by Frederick C. Kramer. It is offered in green transparent cellophane packages containing ten individual vials with contents for one bath each. Bulk packages in solid form and highly concentrated liquid extracts will be placed on the market shortly.

Blacklight Lamps for Inspection

A new line of blacklight (long wave ultra violet) tubes and fixtures for use in difficult inspection procedures, in flaw detection, control, processing, for invisible marking, coding and other manufacturing operations is announced by Ultra Violet Products Inc. Complete information about the lamps together with a bulletin will be sent on request.

Clear Atmosphere for Laboratory

Nothing has as yet been invented to take the place of the



Air filtering unit

nose to recognize and classify odors. If a perfume laboratory is not kept completely neutral a bewildering confusion of fragrances makes accurate appraisal almost impossible. By filtering the air through activated carbon, as is done in the perfume department of the Lever Bros Co. Research Center, no odors can linger because the air is cleared away every few minutes by being filtered through activated carbon the Connor Engineering Corp. reports. In the accompanying photograph the side of the casing has been removed to show the unit.

Trade Literature

Typical applications for five basic groups of products made by the Pennsylvania Refining Co., Butler, Pa. together with descriptive data and specifications are given in a new 4-page bulletin on Penn-Drake specialty petroleum products which may be had for the asking. The products are white oils in a complete range of U.S.P., N.F. and technical grades; petrolatum in all grades and colors; odorless solvents; petroleum sulphonates and soluble oil bases which are compatible with a wide range of petroleum oils.

Up to date information about the importation, processing and use of gum karaya is contained in a new technical service bulletin issued by Morningstar-Nicol, Inc. natural gum department, which is available on request. One of the striking advantages claimed for Morningstar gum Karaya is its ability to gel in cold water. When used as an emulsifying or thickening agent this feature tends to improve the stability of liquid and semi-liquid products in which it is used.

Perfume Specialties for Industrial Applications is the title of a booklet issued by Polak & Schwarz, Inc., 667 Washington St., New York 14, N.Y. It lists a number of mask odors, neutralizers, odorants and industrial perfume oils suitable for various products. Recommendations for their use as well as solubility and other technical data are included and suggestions are given for many new applications for industrial perfumes.

One of the most attractive raw material catalogs that has been produced by an American company is the new loose leaf catalog issued by the Export Dept. of van Ameringen-Haebler Inc. 521 W. 57 St. New York 19, N. Y. The book has a permanent binding and sections will be added from time to time covering various perfume uses. In addition to prices and descriptions of many of the company's products it contains technical hints for the manufacturers of perfumed products.

Four booklets have been issued in English by Dehydag, Deutsche Hydrierwerke of Dusseldorf, Western Germany, which may be obtained from the sole distributors of the company, Fallek Products Co., Inc. The booklets are: Cosmetic bases, 12 pages; Suggested Formulas for Pharmaceutical Ointments, 16 pages; Biological Basic substances for use in Pharmacy, 12 pages; and Suggested Formulas for Cosmetic Preparations, 20 pages.

Harvesting the flowers

OILS OF

Lavender

AND

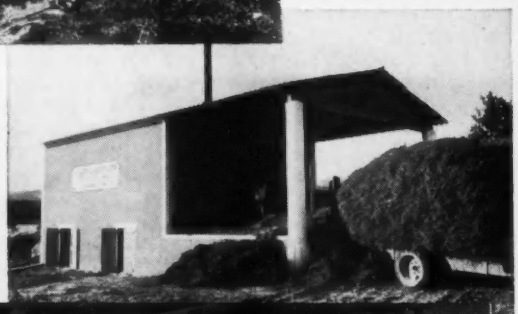
Lavandin

FROM OUR

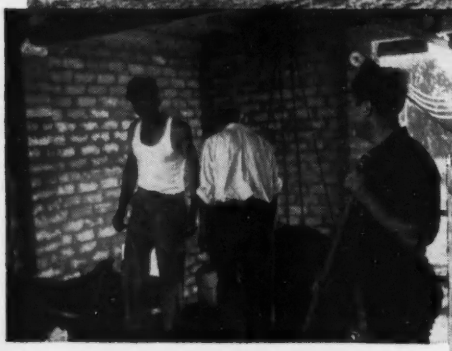
REVEST PLANT

BASSES - ALPES, FRANCE

Bringing the harvest to the distillery



Loading the flowers into the stills



Distillation in process

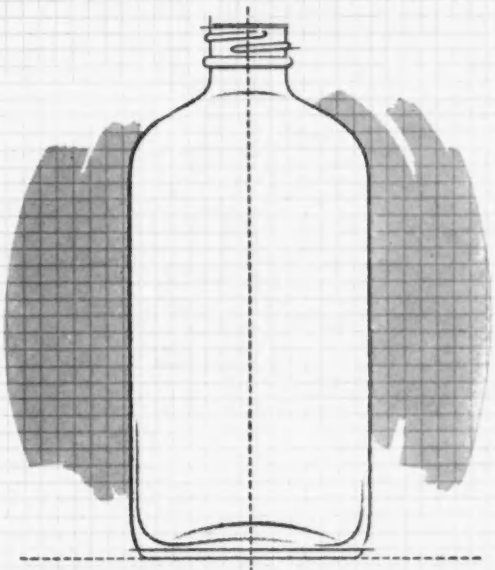
Bertrand Freres offers an entire range of floral absolutes, resinoids and essential oils. We welcome your inquiries on any specific product or process.

Removing the spent flowers from the stills

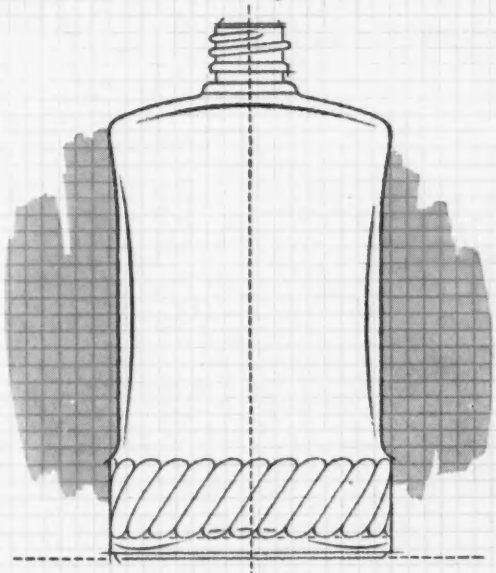
Bertrand Frères, Inc.

443 FOURTH AVENUE NEW YORK 16, NEW YORK

Which one is the SALESpackage?



Is it the package where product protection is the dominant consideration?



Or the package of high style and distinctiveness?

Or the package with advantages for the retailer, or in actual consumption?

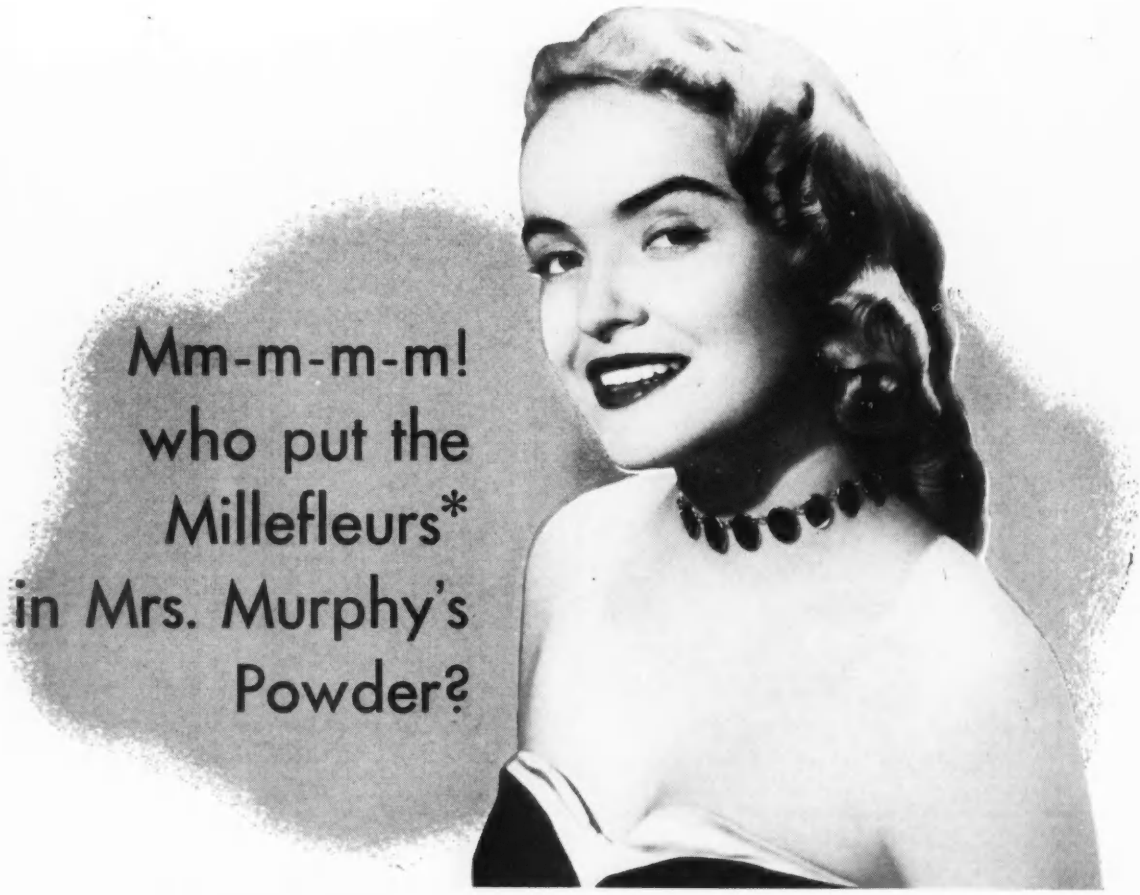
The answer has to be: ALL of them

But few product problems fall into one exclusive category.

The Owens-Illinois method of systematic exposure of packaging problems to the engineer, the designer and the marketer yields an impressive consistency in producing top packaging values.

DURAGLAS CONTAINERS
AN (O) PRODUCT

OWENS-ILLINOIS
GENERAL OFFICES · TOLEDO 1, OHIO



*An **ORBIS** Series **NO. 300** Perfume Concentrate

Looking for just the right odor? Looking to save? Orbis will do both for all your perfumed products. Try Series No. 300, any odor, and see how Orbis helps you keep quality as you cut costs and please customers. Samples gladly sent to manufacturers.

Write today for the Orbis catalog of scents that mean business . . . and more of it.

CHOOSE FROM THESE ORBIS ODORS AT THE LOW ORBIS PRICES

Bouquet CH	**Gardenia**	**Millefleurs**
Bouquet TB	**Heliotrope**	**Muguet**
Bouquet Kashmiri	**Honeysuckle**	**Narcisse**
Carnation	**Jasmin**	**New Mown Hay**
Chypre	**Jockey Club**	**Rose**
Cologne	**Lavender**	**Sweet Pea**
Divinia	**Lilac**	**Violet**
Florida		**Wistaria**

PRICES ALWAYS UNIFORM

25 and 50 lb. lots	**$3.00 per lb.**
5 lb. bottles	**3.15 per lb.**
Trial Pounds	**3.25 per lb.**

OTHER ORBIS PRODUCTS

ESSENTIAL OILS — AROMATIC CHEMICALS
PERFUME BASES — COSMETIC RAW MATERIALS
FRUIT FLAVORS — WATER SOLUBLE GUMS
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ORBIS
PRODUCTS CORPORATION
601 W. 26th STREET
NEW YORK

NEW YORK
CHICAGO
BOSTON
MEMPHIS

NEW PACKAGING and PROMOTIONS

Escapade toilet water and perfume

SHULTON, INC. announces the debut of its new Escapade scent line on May 1. In a large size and a purse size carrier deluxe package, the fragrance will also be available in Toilet Water and Stick Cologne Concentrate. Retail prices of the new Escapade fragrance line are: perfume, ¾ oz., $15; toilet water, 3½ oz., $1.50; Stick Cologne Concentrate, $1; and Perfume Miniature Package, a purse flacon with satin carrier in gift box at $2. A number of fashion and tie-in promotions have been planned by such magazines as *Harper's Bazaar*.

COTY introduces Creamy Skin Perfume, perfume in a creamy base which is said to make it cling to the skin and retard evaporation. A special package consists of Air-Spun Face Powder with fragrance-matched Creamy Skin Perfume Purser and sells for $1.50; a ½ ounce size of Creamy Skin Perfume sells for $1.85.

LENTHERIC introduces its new Stay-Put lipstick shade, First Robin, together with a sample of Miracle Perfume, at $1 together. Its Sta-Put lipstick together with a Red Lilac Perfume sample bottle are also a $1 combination.

TUSSY COSMETIQUES presents four fragrances at half price during its annual summer cologne promotion, together with four matching dusting powders also at half price. From May 27 through August 31, the regular 8 oz. $2 size of the colognes will sell for $1 and the 7 oz. $2 size of the dusting powders for $1 also. Bottle will be new, clear round glass, decorated with ceramically fired white polka dots, and white plastic cap; the dusting will come in a new octagonal powder box, also with polka dots.

NORTHAM WARREN CORP. claims the biggest color promotion ever launched for its new Cutex "cute tomata," its new spring color in Chip-Pruf polish and Stay Fast lipstick. A fashion tie-in has been arranged with Cole of California, as

"Cute tomata" displays

well as with Bonart Handkerchief Co., Herbert A. Goldberg bags and hats, Flower Classics, Inc. with a Cute Tomata artificial rose, Crown Luggage, National Plastikwear Fashions, Inc. plastic raincoats and beach bags. Full page color ads will be featured in leading national magazines and the promotion will be further backed by a newspaper, TV and radio campaign. It will also feature a "cute tomata" contest, with, as first prize, a Hillman Minx Convertible car, a coast-to-coast week's vacation via American Airlines, and a three-day guest visit to Paramount Studios. Two runner-up prizes will also be awarded. The "cute tomata" packages will be featured in a counter display unit.

TWELVE COSMETIC and drug concerns are undertaking a cooperative "Savings Carnival" merchandising promotion through 10,000 participating drug stores. The concerns are: Bourjois, Inc., John H. Breck, Inc., Lever Bros., Hazel Bishop, Inc., Jules Montenier, Inc., Liquinet Corp., McKesson & Robbins, Northam Warren Corp., Pepsodent Co., Weco Products Co., Wildroot Co., and J. B. Williams Co. Consumers will be offered special savings on merchandise of the 12 participating manufacturers. Purchase of one deal of each of the manufacturers makes a store eligible to participate in the promotion, built around 19 nationally advertised items, and backed by motion displays for counters, window banners, store streamers and product posters. Purchase of one deal of each of the manufacturers makes a store eligible to participate in the promotion.

PFUME LABS. offers a self-demonstrating display lamp to show its Pfume in action. Pfume is an aromatizer that fits all light bulbs, without taking the light away, according to publicity releases. The heat vaporizes the area with a fragrance or deodorant. The display, aimed at impulse buying, uses a wrought iron lamp and bulb, and

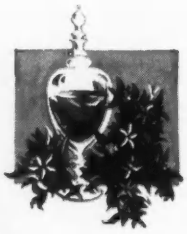
Atomizer operates on bulb

may be used in window or on counter. It holds the cellophane packaged atomizer and three Pfume discs, which retail for $1; refills are three for 50 cents.

CARYL RICHARDS, INC. has launched a general and women's magazines advertising drive for its professional beauty salon line called "Just Wonderful." comprising cold wave, hair cream and shampoo products.

HOUSE OF TANGEE offers an "844 deal," a mounted card in four colors, holding eight $1 lipsticks, all different shades, to the retail trade for $4.

Six Outstanding Modern Compositions!



EXOTIQUE #6270
A heavy, lasting Oriental extremely powerful and cloying.

BOUQUET "D" #7618
Imparts a delightful effect and lasting freshness. Clear topnote retaining full-bodied odor.

JADENE #7620
Full fragrance reminiscent of night blooming Jasmine combined with Gardenia.

LEADING THE PERFUME PARADE

Penick Perfume Compounds when used as bases for your new odor creations or to supplement your present odors will assure them of being out in front! They will guarantee shelf-life and customer appeal. Blended from the finest oils, aromatics, and fixatives, they are triumphs of the perfumer's art.

SOIE VERTE #7631
An artful blending of Bergamot, citrus and aldehyde notes. An unusual bouquet.

FLORAL BOUQUET #7653
This bouquet is an unusual floral note for perfume and cologne.

BOUQUET PERFUME OIL #7677
A retentive floral composition particularly useful in creams and lotions.

Investigate Penick perfume bases – over 3,000 to choose from. Test them for yourself . . . a request on your letterhead will bring you samples. Write Dept. 8

Distillers of Rare and Quality Essential Oils — Manufacturers of Aromatics

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735 West Division Street, Chicago 10, Ill.
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TOP NOTES by

FLOWER of the Month

April—Sweet Pea
or Daisy
May—Lily of the Valley
or Hawthorn

MAYBE YOU KNOW HIM . . .

RUSSELL EDWARD BULL wasted no time in deciding his profession. The day after his graduation from St. Louis University with a B.S. in Commerce, he started "calling on the trade." Since then, with only one interruption—a four-year "hitch" in the Navy spent at sea—selling has been his way of life. Says Russ: "The old philosophy that 'man does not live by bread alone' best describes the real sense of personal satisfaction I receive from my work of helping to solve my customers' problems. My prescription: For the finest see Fritzsche. . . . I proudly call these customers my friends. They're in the Corn Belt of South Dakota, Nebraska, Iowa and Missouri; in the agricultural and industrial plains of Oklahoma and Texas; and in the fertile delta of Louisiana and Mississippi. . . . My life is complete with five typical American youngsters and a devoted wife who makes them behave. Someway, somehow I manage to squeeze in a little time for my pet diversions: my gardens and golf clubs." *That*, in part, is Russ Bull, Fritzsche representative operating out of our St. Louis office. For the rest—his warm personality, his sincere, understanding and practical approach to each customer's problem, and his fine interpretation of the word service—these are the things that have established him as a salesman par excellence in the tough field of competitive selling.

WITH all its centuries of experience and all its accumulated skills, perfume science has never devised any substitute for the "nose" test as an aid in the formulation and perfection of a fragrance. It is his extrasensory perception as well as his artistry in the manipulation of ingredients that enables the fine creative perfumer to endow his fragrance products with appealing beauty, balance and personality. Perfumes produced in the Fritzsche laboratories are developed under the constant supervision of experts and it is upon this age-old "nose" test that they rely for the refinements of formulation that determine the superiority of their finished products.

FRITZSCHE *Established* 1871 *Brothers, Inc.*

PORT AUTHORITY BUILDING, 76 NINTH AVENUE, NEW YORK 11, N. Y.

BRANCH OFFICES *and* †STOCKS: *Atlanta, Georgia, Boston, Massachusetts, *Chicago, Illinois, Cincinnati, Ohio, Cleveland, Ohio, †Los Angeles, California, Philadelphia, Pennsylvania, San Francisco, California, St. Louis, Missouri, †Toronto, Canada and *Mexico, D. F.* FACTORY: *Clifton, N. J.*

A THOUGHT for the Month:

"Silence is a true friend who never betrays."

—CONFUCIUS

RECOMMENDATION of the Month

FLOWER BASKET

This is a fragrance designed for creams—a very special, very lovely fragrance embodying rose, lily and lilac with a strong backing of ylang for top note and coverage. The proportioning and blending of these florals with other trace elements has resulted in a delightful, new perfume—soft and appealing—which we highly recommend for all types of creams. The price: $12.50 per lb. Write us for sample of FLOWER BASKET . . . . or use coupon.

ONE PRODUCT . . . . OR A COMPLETE LINE

Our organization is geared to assist any manufacturer in the development of fragrance products, whether it be for a single item or an entire line. Large establishments, unfamiliar with the toilet goods field, but seeking to broaden their markets by the addition of their own private label perfumes, cosmetics or other toiletries, can have all of their product-development and laboratory work capably handled by *our* experts. Small manufacturers who lack the necessary laboratory and technical facilities will find our assistance invaluable. Therefore, if you are considering production of any kind of fragrance product, our perfume development division can render you whatever creative laboratory assistance your problem may require. We cordially invite your inquiries.

CREATORS of MADE-TO-ORDER FRAGRANCES for PERFUMES, TOILETRIES and COSMETICS

•

ODORANTS and DEODORANTS for INDUSTRIAL and TECHNICAL USE

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SUPPLIERS of AROMATIC CHEMICALS, BASIC PERFUME and FLAVOR RAW MATERIALS

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FRITZSCHE *Established* 1871 **Brothers, Inc.**

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BRANCH OFFICES and *STOCKS: *Atlanta, Georgia, Boston, Massachusetts, *Chicago, Illinois, Cincinnati, Ohio, Cleveland, Ohio, *Los Angeles, California, Philadelphia, Pennsylvania, San Francisco, California, St. Louis, Missouri, *Toronto, Canada and *Mexico, D. F. FACTORY: Clifton, N. J.

Good Scents

FOR PERFUMERS

MEDIUM PRICED PERFUMES for the CHRISTMAS TRADE

There is abundant sales potential in the following perfume concentrates, either as individually offered extracts or as a packaged deal of two, three or four fragrances, for the Christmas trade—and for long, long afterwards. Each specialty is beautifully composed to give the user the utmost in lasting pleasure. . . . .

MAHOGANY BLOND—W-361 — $30.00 lb.

This is a rich, woody bouquet with floral notes of lily, rose and jasmine. Its effect is strong and lasting

PRECIOUS WOOD—V-628 — $40.00 lb.

A soft-scented, alluring fragrance based upon tropical woods, gums and balsams. Long-lasting, uniform evaporation at all stages

SEVENTH VEIL—V-604 — $55.00 lb.

An exciting, insinuatingly beautiful fragrance composed of richly blended florals and Oriental spices, well fixed with selected animal scents

CELESTIAL SPICE—W-418 — $20.00 lb.

An interesting new floral perfume, low in cost, but with a brilliant, sparkling fragrance from first whiff to last. It's a spicy Oriental blended with rose and lily

Why not try all four of these fragrances? On remittance of $5.00 (check or money order) we'll send you ½ oz. bottles of each—enough to make up 2 to 2½ ounces of finished extract. Use coupon below.

FRITZSCHE BROTHERS, Inc.
76 Ninth Ave., New York 11, N.Y.

Gentlemen: Please send me ½ oz. samples of the fragrances I have checked. Attached is check (or money order) for $5.00 to cover cost and handling.

NAME ..... ☐ MAHOGANY BLOND W-361

TITLE ..... ☐ PRECIOUS WOOD V-628

COMPANY ..... ☐ SEVENTH VEIL V-604

ADDRESS ..... ☐ CELESTIAL SPICE W-418

CITY ..... ZONE .... STATE ..... ☐ FLOWER BASKET W-400

WITH all its centuries of experience and all its accumulated skills, perfume science has never devised any substitute for the "nose" test as an aid in the formulation and perfection of a fragrance. It is his extrasensory perception as well as his artistry in the manipulation of ingredients that enables the fine creative perfumer to endow his fragrance products with appealing beauty, balance and personality. Perfumes produced in the Fritzsche laboratories are developed under the constant supervision of experts and it is upon this age-old "nose" test that they rely for the refinements of formulation that determine the superiority of their finished products.

FRITZSCHE *Established* 1871

Brothers, Inc.

PORT AUTHORITY BUILDING, 76 NINTH AVENUE, NEW YORK 11, N. Y.

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HOW ABOUT A NICE-TASTING MEDICINE, THIS TIME?

THAT'S a request any doctor can comply with today because there are medicinals available. In fact, some of the pediatric products now on druggists' sh and approved by juvenile tasting panels. Which is simply applying to pharma ployed by food and beverage manufacturers for many years . . . Ethical manufact countless hours of needless trial and error by enlisting the aid of flavor specialis embraces the applications, the compatibilities, the limitations and the advantages flavoring raw materials and compositions. FRITZSCHE'S scientific approach to assures the pharmaceutical manufacturer not only a much more palatable product, every test whether of stability, uniformity or of time. Furthermore, we regard research or laboratory—as confidential in the extreme. May we invite you, therefor in developing flavors for any of your oral products now or soon to be in the m

For GOOD TASTE
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HOW ABOUT A NICE-TASTING MEDICINE, THIS TIME?

THAT'S a request any doctor can comply with today because there are so many pleasant tasting medicinals available. In fact, some of the pediatric products now on druggists' shelves have flavors selected and approved by juvenile tasting panels. Which is simply applying to pharmaceuticals a technique employed by food and beverage manufacturers for many years . . . Ethical manufacturers can save themselves countless hours of needless trial and error by enlisting the aid of flavor specialists whose broad experience embraces the applications, the compatibilities, the limitations and the advantages of literally thousands of flavoring raw materials and compositions. FRITZSCHE'S scientific approach to every problem it tackles, assures the pharmaceutical manufacturer not only a much more palatable product, but one that will survive every test whether of stability, uniformity or of time. Furthermore, we regard all such work—consultive, research or laboratory—as confidential in the extreme. May we invite you, therefore, to accept our assistance in developing flavors for any of your oral products now or soon to be in the making.

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LUCIEN LELONG is marketing Joli Bouquet, a corsage package containing a purse-sie flacon of Joli Bouquet perfume with a cardboard nosegay boily and bedecked with artificial flowers. It is priced at $1. Also in the "Joli Bouquet" group is a bottle of Cologne and a purse of perfume, selling together for $2; a drum of dusting powder is $1.50. The line also includes perfume, cologne, solid cologne, and cream sachet.

POND's Angel Face, $1 powder-and-foundation combination with puff in mirror-case is featured in plastic counter cabinet with its own shade selector. It comes wither with a pilfer-proof plastic cover, or without cover for self-service.

GWEN & LORRAYNE are expanding distribution of Helaine Seager's home facial, Pink Ice, eastwards from their present Pacific Coast marketing area. The aim is to cover most large U.S. markets by the end of 1954. Advertising is exclusively over radio and TV, with live television commercials by Gwen Seager and Lorrayne Bunn, heads of the firm.

HELENA RUBINSTEIN presents a new scent line, called Noa Noa, Tahitian for "so very fragrant." Noa Noa Cologne Concentrates are encased in mock cut glass bottles, cap-

Packaging in Tahitian design

ped in bamboo, with cartons in old Tahitian design. The perfume bottle, completely encased in a bamboo stick, sells at $17.50 for the ounce; the Cologne Concentrate comes in three sizes, $2.25 for the 2 oz. one, $3.75 for the 4 oz. one, and $8 for 10 ozs. Perfumette has a goldplated bamboo stick as cover; it sells for $3. Helena Rubinstein's new nail polish and lipstick shade, following the Tahitian motif, is called Gauguin Pink. The lipstick comes in a jeweled case at $2 and a wedding ring case at $1.10; the nail polish sells for 60 cents.

PRINCE MATCHABELLI's Wind Song perfume comes in a crown-shaped bottle, inserted in a die-cut slot in white fabric cushion, against an arch-shaped reflecting backdrop of gold metalized acetate. The box is cubeshaped, edged with gold and covered with an ivory satin-like fabric.

BOURJOIS offers a combination of twin floral colognes in two-ounce

Twin bottles combined by fence base

bottles. Pairs of bottles are held together with an inch-high box base replica of a picket fence. Said to represent a $2 value, each pair sells for $1.

J. B. WILLIAMS' Skol Suntan lotion has been upped in price. It sells now for 35, 59 and 98 cents in glass, and 79 cents in plastic. Big space color advertisements have been scheduled in four leading national magazines, along with one-minute and 20-second TV spots in major metropolitan markets, car cards and newspaper advertising. A sister product, Skolex sun-allergy cream, a sunburn preventive, will be backed with space ads in two national magazines as well as full pages in professional magazines for dermatologists, doctors and nurses.

ELIZABETH ARDEN announces Ardena Invisible Veil Powder, in loose powder form, in a flowered three-dimensional box, at $5. Ten shades are offered.

DERMETICS' newest dual-purpose make-up gadget is a golden eyebrow pencil which also serves to color the lid. The four shade-names are angelic Blue, come hither Black, double take Brown and whistle bait Green. The retail price is $1.25.

Jean Nate's Bath Bubbles

JEAN NATE presents Bath Bubbles in a new chartreuse bottle with black labeling that harmonizes with other Jean Nate packaging. The W. Braun Co. bottle is ceramically sprayed and is topped with a black ball cap. The 6 oz. size sells for $1.75, the 16 oz. one for $3.75.

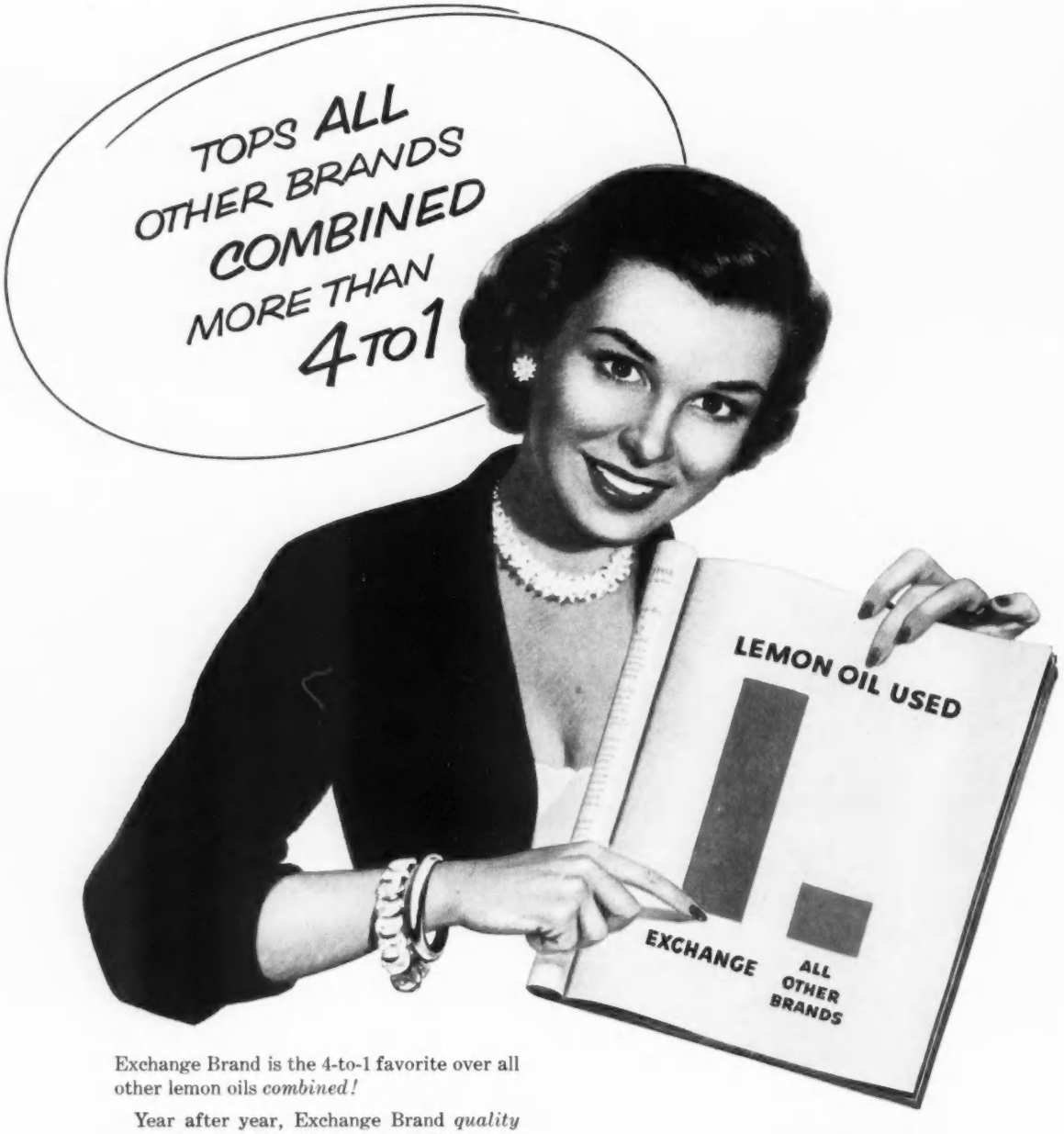
HELENA RUBINSTEIN offers Suntan Spray in an aerosol spray container, to cover hard-to-reach areas. The product is said to work into the skin instantly, without leaving sticky residues. The price is $1.50.

HAZEL BISHOP announces a color-coordinated combination, in a pilferproof boot, of its Lasting Lipstick and its new 40 cent Nail Polish, both for $1.10, the price of the lipstick alone.

POND's offers the trade one piece free out of every dozen on purchases of Pond's Talc and Dusting Powder, an 8⅓% saving. A full color display packer holding 6 large talcs is included in the offer. Talc is 29 and 43 cents, dusting powder, 89 cents.

LENTHERIC offers Arkansas Traveler, ½ oz. bottle of Tanbark Cologne, After Shave Lotion, Scalp Stimulant, and Men's Deodorant, side by side in a window-type carton with hillbilly-like line drawings. The price is $1.

YARDLEY launches a major spring promotion of its Bond Street fragrance with two new packages, one featuring a 1¾ oz. bottle of toilet water and a sample size bottle of perfume in a white frame, screen with gold bouquet motif; the other a 3 oz. bottle of Bond Street toilet water with nosegay under an acetate lid. The former sells for $1.25, the latter for $1.75.



Exchange Brand is the 4-to-1 favorite over all other lemon oils *combined!*

Year after year, Exchange Brand *quality* proves itself in sales. That's because Exchange Lemon Oil comes only from California lemons grown and skillfully processed by Sunkist Growers.

When a little lemon oil goes so far, why risk buying anything but the best?

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DODGE & OLCOTT, INC.
180 Varick St., New York 14, N. Y.

Exchange

OIL OF LEMON U. S. P.

Coppertone counter display

DOUGLAS LABS. CORP. offers a three-dimensional Coppertone counter display unit. A vivid 14 inch high wire and paper palm tree stands on a sunny beach setting which serves as a base for display of a Coppertone jar, bottle, or spray container. An adaptable cut-out enables the retailer to feature any preferred Coppertone item. The display can be shipped flat and almost completely intact.

LENTHERIC offers Mist Toilet Water in a spray-type bottle with polished brass cap. Prices range from $2 for Red Lilac scent to $2.75 for Dark Brilliance and Adam's Rib.

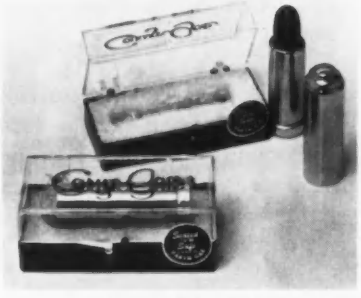
ALEXANDRA de MARKOFF offers four new toilet waters, Muguet, Frangipani, Rose Geranium, and Bouquet. For a limited time only, a 4-ounce bottle, regularly $4 according to the manufacturer, will be sold for $2.

HELEN NEUSHAEFER's Color-Teller Tip Lipsticks are displayed on a four-color easeled 11x14 inch display card, holding 18 units, and featuring a four-color photograph of Helen Neushaefer.

ALEXANDRA de MARKOFF offers gift-boxed soaps; a box with six Guest Soaps sells for $1.25; boxes with three bath size soaps and four hand size soaps sell for $2.50.

COTY has announced the winners in its Christmas Window Display Contest. Open to drug and department stores, it was held for windows featuring Coty's special Christmas presentations installed for a minimum of one week's time, from November 16 to December 14. Each participating store submitted pictures of the windows. First prize was $500, the second $300, and the third $200, with two consolation prizes of $100, a French presentation of a perfume music box for four stores who won Honorable Mention, and a gift $15 size Muse Perfume) to all entrants in the contest.

NORTHAM WARREN CORP. offers an Odorono deodorant special through June 30. The $1.25 regular size Spray is selling for 69 cents, the regular size 75 cent Cream for 47 cents. A special full color counter display features a dancing couple that actually dances; it operates on a flashlight battery. National magazine, newspaper, radio and TV ads have been scheduled.



Caryn Gae lipstick

CARYN GAE CO. offers Caryn Gae lipstick, containing lanolin, and vitamins. It is said to be non-smearing, and to erase the after-effects of sigarettes and other odors through a "new wonder compound KBS," without the use of perfume. It comes in six shades, and sells for $1.25.

TUSSY COSMETIQUES will debut its new Bright Secret series on May 20, consisting of perfume, cologne concentrate and dusting powder. Boxes are packaged in scarlet and gold, with embossed golden daisies and gold block lettering. Bottles have a taper gold vacuum metalized cap. Perfume sells for $10 for the 1 oz. size, a 1 dram Perfume Vial, a 2 oz. bottle of Cologne Concentrate, and a 4½ oz. dusting powder box with puff each sell for $1.50.

Tussy's new Bright Secret line

ZOTOX PHARMACAL CO. is introducing Zotox, its new antidote for poison ivy, oak or sumac, in matching Robert Gair Co. display cartons, holding either 6 or 12 tubes of Zotox. One top flap of the light blue and dark green carton folds under on both sizes to form an easel which holds contents at an angle. The other flap stands up and carries a sales message.

CHARLES OF THE RITZ's Perfect Rose is a new rouge and lipstick spring shade. The lipstick is $1.50, Compact Rouge is $1, Jumbo Rouge $1.75, and Cream Rouge comes in $1.25 and $2 sizes.

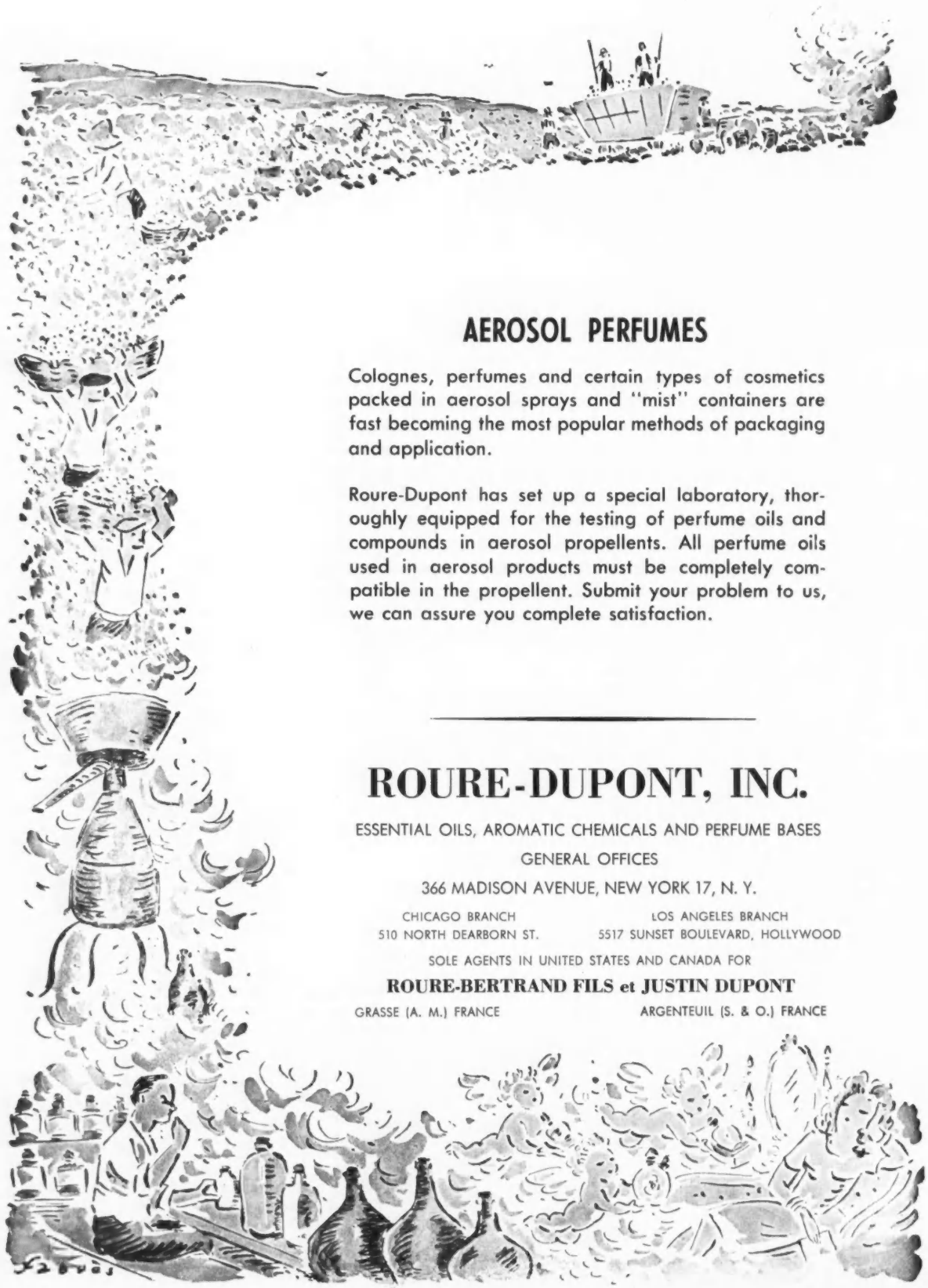
THE NATONE CO. offers its new Haraway Gelee, to remove unwanted facial hair, in a self-service counter display holding six retail size packages. Each package sells for $1.10.

HELENA RUBINSTEIN offers Contour-Lift Film against dryness, wrinkles, lines and sagging contours, together with Lanolin-Vitamin Formula with Vitamin A, for $3 for the two, a saving of 75 cents, throughout May.

New half-ounce perfume bottle

HOUSE OF JEAN PATOU announces Joy Poudre de Toilette bath powder in a shining white round box topped with an ebony cover and with gold lettering. It is priced at $7.50. The firm has introduced half-ounce sizes of three of its perfumes: Moment Supreme and Amour Amour at $10, Cocktail Dry at $12.

REVLON's Silken-Net, a new liquid hair spray to keep hair in place, sells for $1.35.



AEROSOL PERFUMES

Colognes, perfumes and certain types of cosmetics packed in aerosol sprays and "mist" containers are fast becoming the most popular methods of packaging and application.

Roure-Dupont has set up a special laboratory, thoroughly equipped for the testing of perfume oils and compounds in aerosol propellents. All perfume oils used in aerosol products must be completely compatible in the propellent. Submit your problem to us, we can assure you complete satisfaction.

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The Editorial - "WE"

Fragrance Foundation Celebrates a Birthday

IT was the fifth birthday for The Fragrance Foundation when that organization held its annual convention last month, and it was a birthday that came at a time when a center disseminating information on perfumery was more necessary than ever. In fact, this year may be a crucial one, in which the success of The Foundation, and of its members, in bringing the message of fragrant living to the American people, will receive its severest test. Hitherto, at the smallest sign of a levelling off on the industrial scene, the so-called luxury industries were the first to be hit. With even the slightest increase in unemployment, such as exists in the United States today, the purse strings are pulled in, and the woman of the house scratches off her "must" list many items that have not become indispensable, while she seeks a manner of satisfying her needs for other products at a lesser cost. We believe that, should the economic situation not become better, it is likely that the total number of units of lipsticks or boxes of face powder will not decline. Can the same be said for perfume, toilet water, cologne, and other fragrance products? Have they become so much a part of everyday living for a vast majority of women that these consumers are unwilling and unable to retrench on that score, regardless of the economic necessities? Obviously, and realistically, the answer is no. Fragrance has not reached the point of being as indispensable as visible makeup. But very real progress has been made along that line. Not only are there more people buying and using fragrance products, but certainly more people are closer to the point of considering them necessities in their good grooming habits. That so many women have come so far along this road is a testimonial to the success of The Fragrance Foundation. We believe that the perfume industry, and The Foundation which represents so large a part of it, will see the beneficial results of these last five years' activity during the months of 1954 that lie ahead.

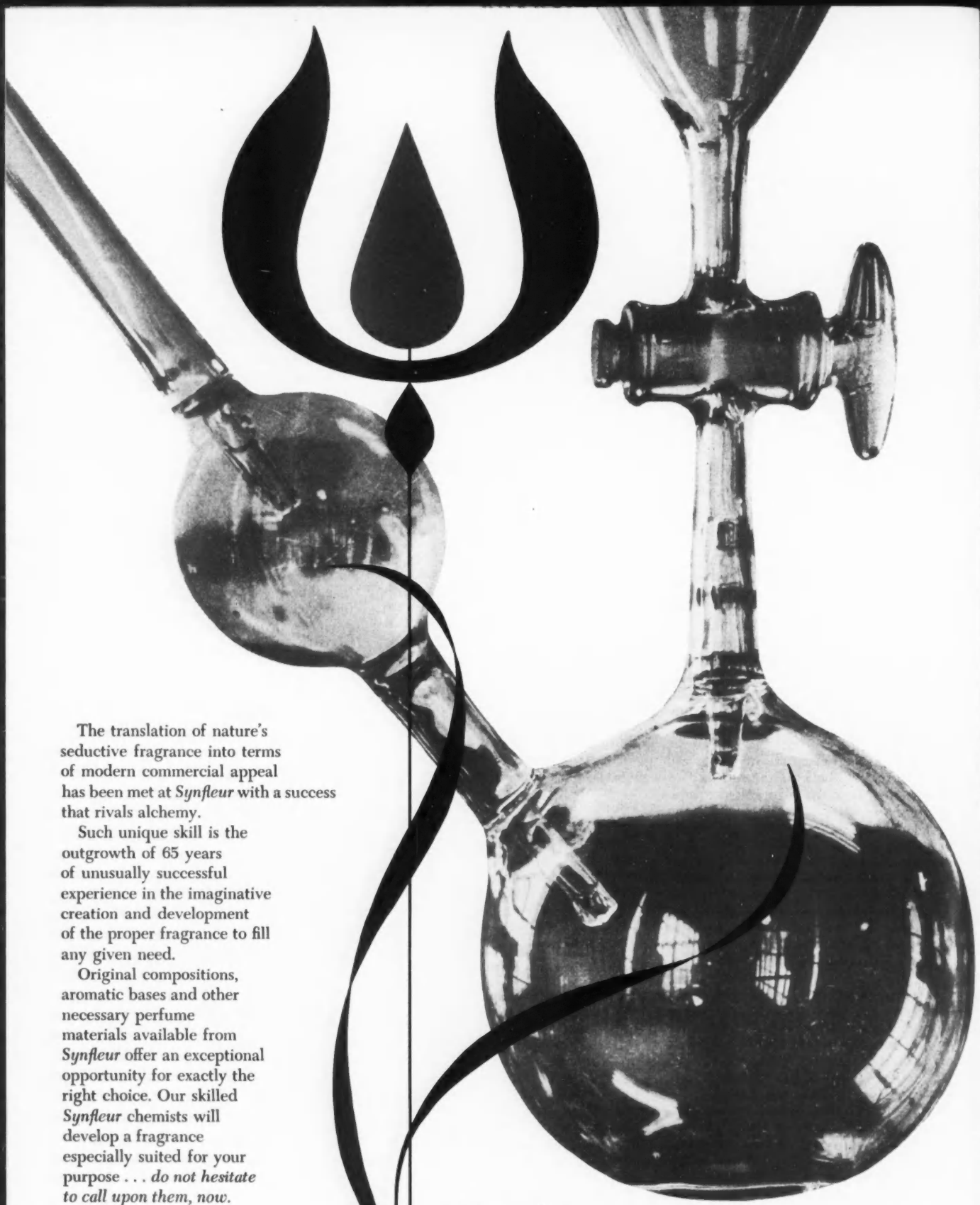
TV Audiences See Fragrance Film

WHEN we talk of reaching the American public today, we must talk of television. No other medium has so large and attentive an audience. No other medium can bring its message, whether it be cultural, political, or commercial, with such unmistakable impact. We were for that reason most gratified that The Fragrance Foundation had had a color film made for distribution to television stations, a well-acted and well-narrated documentary that dips into the question of perfumery, as seen in the home and in the store. A film of this type is a remarkable step forward; it will be seen literally by millions. What does it accomplish for that audience? It does not actually teach very much about perfumery, nor about how to choose or to use a fragrance—subjects that lend themselves so poorly to the usual methods of demonstration. The accomplishment of the film is that it awakens and emphasizes the consumer's perfume awareness. Not only will some people watching the film be reminded that there's a perfume they have been meaning to buy, or that perfume might be the perfect solution to that gift problem; but they are also inculcated with another dose of perfume-consciousness which, when added to the newspaper stories, advertisements, window displays, and other media, make these people better customers and users for fragrance.

The Foundation is to be congratulated on this film, and on making a vigorous effort to go forth in the important field of television—an effort that was urged in the columns of this publication just about a year ago. But the film, which was executed in an enviably professional manner, left us with the feeling that the commercialism might have been a little more subtle. Tell people about perfume, yes! Make them conscious and aware of perfume, by all means! Give them hints as to how to use it, suggest the link of fragrance and frequence, and overcome many of the prejudices. There is a great deal to be done, but the message will be more effective, we feel, if the viewer is not quite as aware that she (or he, for that matter) is being given a sales talk.

And a Final Word On Fragrance

ONE more word about fragrance and the magnificent work of The Foundation, and we sign off for this month. Maybe so many editorial notes on a single theme might give some readers the idea that we are in a rut. But we did attend the fifth birthday confab, and came away with a few ideas and sug gestions. In the literature issued up to the present time, The Foundation has stated that it is seeking to promote the distribution, sale, and use of what it terms "fragrance products," and these are described as including perfume, toilet water, and cologne; creamy and stick fragrances; such bath products as salts, oils, essences, bubbles, and powder, as well as perfumed soap;



The translation of nature's seductive fragrance into terms of modern commercial appeal has been met at *Synfleur* with a success that rivals alchemy.

Such unique skill is the outgrowth of 65 years of unusually successful experience in the imaginative creation and development of the proper fragrance to fill any given need.

Original compositions, aromatic bases and other necessary perfume materials available from *Synfleur* offer an exceptional opportunity for exactly the right choice. Our skilled *Synfleur* chemists will develop a fragrance especially suited for your purpose . . . *do not hesitate to call upon them, now.*

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Synfleur Scientific Laboratories, Inc.

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and, finally talcum powder and sachets. An imposing array of products, indeed. An examination of this list immediately discloses that the line of demarcation is thin which attempts to separate fragrance products from those cosmetics which have a utilitarian value over and above the odor. Nevertheless, as new materials are developed, it is sometimes necessary to broaden one's scope, to reset one's sights. We feel that, as a result of technical and marketing developments during recent times, The Foundation might consider, as being within the scope of the meaning of fragrance products, such important items as home or room fragrances. The different between a scent for use on the body and one to spray around the room to create a pleasant aura is a slight one, and the room product, although strictly speaking not a cosmetic, is certainly an integral part of any campaign to make America fragrance conscious. Finally, although men's fragrances have never been specifically included or excluded from the work of The Foundation, we feel that there is need for a positive restatement that colognes and other related items, designed specifically for men, fall within the purview of this organization, and that the goal of the group includes making men aware, not only of fragrances for their ladyfolk, but for themselves, as well.

The Use and Abuse Of Statistics

THE very lively *Monthly Bulletin* comes to our desk from the firm of consulting chemists, Di Cyan & Brown, and its February 1954 issue contains some cogent remarks about statistics. "Statistics is at times used illegitimately to support a conclusion decided aforehand—that does not, however, impugn its legitimacy," we read in this article. Today, when chemists are becoming increasingly aware of the value of statistics, of the use of this important tool, we note with considerable satisfaction the sophisticated attitude that is taken toward anything that smacks of an average, a median, or a mean. What is correctly pointed out by the writer in the *Monthly Bulletin* article cited above is that the misuse of a scientific weapon is in no sense an argument against the value of that weapon. A most amusing and highly readable book recently appeared, under the catchy title, "How to Lie with Statistics." It is a book that we can recommend wholeheartedly, but as we reflect upon the title, we wonder whether a statistical study could be made to determine the percentage of readers who, upon seeing such a title, come away with the impression that every statistic is a means of telling a lie.

Selling Enzymes To the Consumer

WE imagine that a large part of our adult population had heard of the word "enzyme" before last summer, but few people, other than scientists, had any idea of the meaning of the word. Then came the first anti-enzyme dentifrice advertisements, and the rest is history. However, as any college boy taking Bio 1 knows, enzymes are very necessary to human and animal life. Along comes a serious advertising research group, known as the Institute for Research in Mass Motivations, with the warning that the day may soon be arriving when industry will be seeking to sell enzymes, and not anti-enzymes, to the public. "Believe it or not," the Institute says, and we can indeed believe it, "enzymes can clean teeth, and may become a very valuable selling point in tomorrow's dentifrices." We pity the poor consumer when the copywriter has finished explaining that one.

TGA Sessions To Be Restricted to Members

ONCE again, the forthcoming convention of the Toilet Goods Association, to be held May 11th to 13th at the Waldorf-Astoria Hotel in New York City, will be restricted to members of the Association, and to such guests as college professors, dermatologists, and other individuals who would not be considered eligible for membership. We have commented on this policy before; it is a sharp departure from the attitude taken in former years, and it is a departure which we feel is fully justified. The work of the TGA on the legislative front, on the tax problem, and on all issues in which the welfare of the industry is involved, helps all companies, whether or not they are members, although only the members underwrite the bills and give intellectual and political leadership to such activities. There is no reason, however, for those who have not joined this group to benefit from the meetings equally with those who are members. No one in the industry, whether member or not (and few, very few, of the medium-size or larger firms are outside the ranks) can justifiably attack this restrictive rule.

Restriction Needed On Entertainment

THE TGA has again appealed to its members to continue their practice of the past few years of closing their entertaining suites during the business sessions of the convention. Now, it is no secret that this has not been complied with to any great degree. We hope that this year there will be more cooperation with the convention committees, with the entertaining limited to after-hours and, if anyone gets up that early, before-hours. Personally, we are convinced that some measure stronger than this appeal should be made. Perhaps a pledge from every member would elicit greater compliance.

Is This a Case Of Too Much Success?

ONE of the important events of the year in the drug and cosmetic industry has been the annual drug trade dinner held by the Drug, Chemical and Allied Trades Section of the New York Board of Trade. It is a tribute to the industries represented, to the organization holding the dinner, and to the progress of American economy, that these dinners have grown in both size and importance. At the one held early in March, there were some 2300 people present. It was our feeling that such a group is too big, is rather unwieldy, and is self-defeating, in the sense that it becomes difficult to get around, mingle with those present, make new acquaintances, and renew old ones. Perhaps the answer might be to break this group up into several smaller components, consisting of the pharmaceutical, heavy chemical, cosmetic, and other sections. After all, sixty years have passed since the first dinner of this type was held by what was then called the Drug Trade Section of the New York Board of Trade and Transportation. The industries making up such an organization have expanded to such an extent that the character of the annual get-together may have to be changed. As a matter of fact, there are sixteen industry classifications in DCAT, and the smallest of them could probably have an annual dinner larger than the group that launched these affairs in 1894.

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- ☐ Bois de Rose
- ☐ Cananga
- ☐ Cassia
- ☐ Cedarleaf
- ☐ Cedarwood
- ☐ Cherry Laurel
- ☐ Cinnamon
- ☐ Citronella
- ☐ Clove
- ☐ Copaiba
- ☐ Coriander
- ☐ Eucalyptus
- ☐ Geranium
- ☐ Grapefruit
- ☐ Guaiacwood
- ☐ Labdanum
- ☐ Lavandin
- ☐ Lavender
- ☐ Lemon
- ☐ Lemongrass
- ☐ Limes
- ☐ Orange
- ☐ Patchouly
- ☐ Peppermint
- ☐ Petitgrain
- ☐ Pimenta
- ☐ Rosemary
- ☐ Sage
- ☐ Sandalwood
- ☐ Spike
- ☐ Spearmint
- ☐ Thyme
- ☐ Vetivert
- ☐ Wintergreen
- ☐ Ylang Ylang

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In the treatment and control of many afflictions of the eye, one of the most complex and valuable structures of the body, physicians find Pfizer's Cortril Ophthalmic Ointment (brand of hydrocortisone acetate) highly effective. To guard the purity and efficacy of Cortril, Pfizer relies on Sheffield Tubes. Other widely used Pfizer products packaged in functional *Sheffield Process Tubes* include Terramycin® Ointment with Polymyxin B Sulfate, Terramycin Ophthalmic Ointment with Polymyxin B Sulfate, Cortril Topical Ointment, Polymyxin B Sulfate Ointments and Bacitracin Ointments.

At Sheffield, tube quality and uniformity are closely controlled by exacting specifications, inspection and research designed to better protect important ethical products. For value and service that exceeds your expectations, try Sheffield Tubes on *your* next order.

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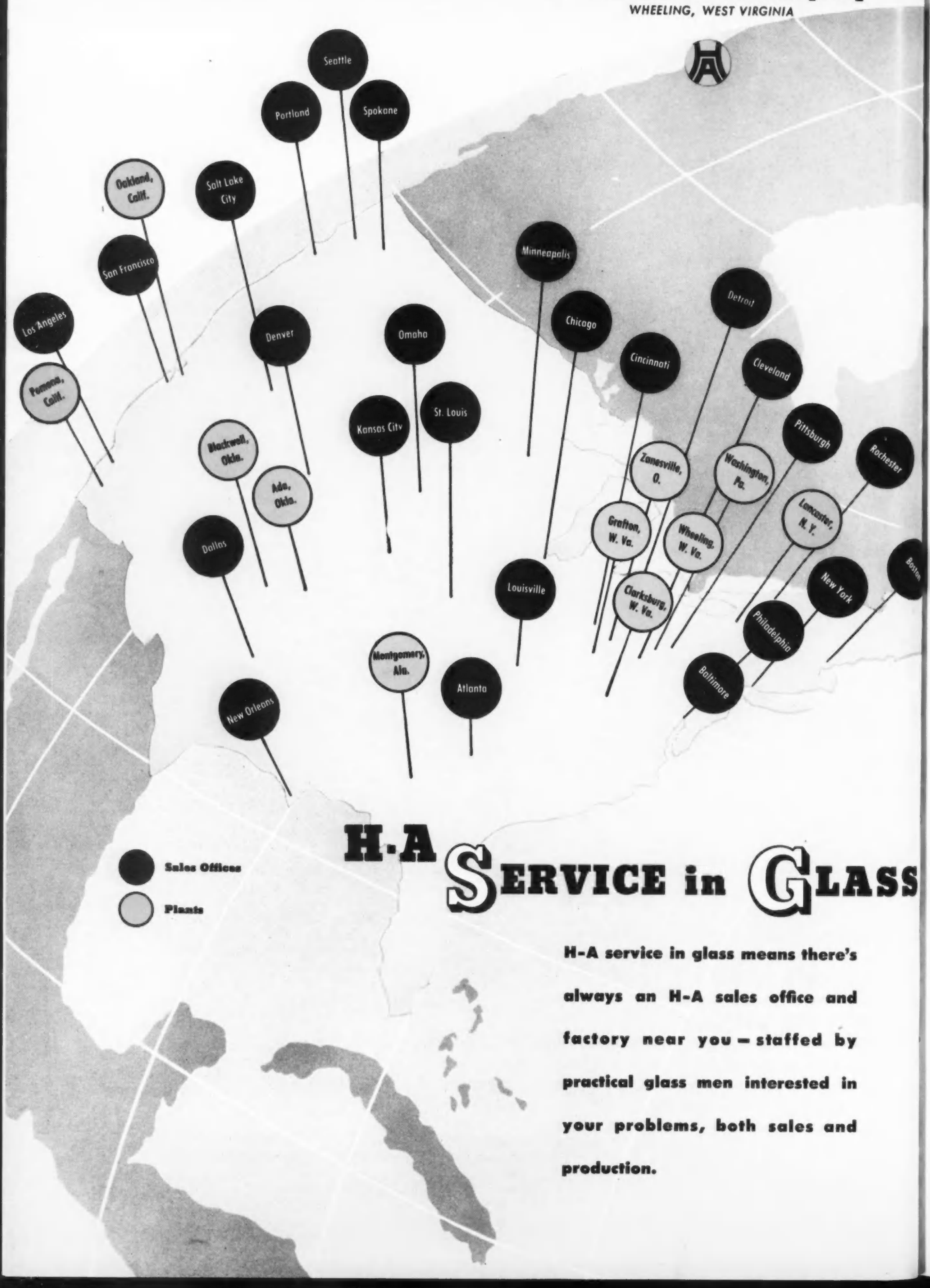

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Flavor Section

Powdered Fruit Juices

Preparation of powdered fruit juices which can be used as flavor concentrates

MORRIS B. JACOBS, Ph.D.

A SEARCH of the patent literature with respect to flavor applications for over the past forty years discloses that probably more patents have been issued for methods for the manufacture and preparation of powdered fruit juices than for almost any other type of flavoring products. This is but one indication of the interest exhibited in this phase of both activity and literature covering this topic. I hope that when I get the opportunity I will be able to cover this information for this section of *The American Perfumer.*

The Eastern Regional Research Laboratory and other research laboratories of the Bureau of Industrial Engineering Chemistry (these laboratories and the name of the Bureau itself may be changed in the reorganization of this department), United States Department of Agriculture have pioneered in the development of processes and equipment for the preparation of flavor concentrates. These developments have been described in a series of papers issued by the Bureau of Industrial and Engineering Chemistry and in articles published in various journals by staff members of these regional research laboratories. Your editor published a review of the essence recovery method as applied to apple essence in this section.

Grape Juice Powder

As a continuation of the work performed along these lines by the Eastern Regional Research Laboratory (Philadelphia 18, Pennsylvania), Eskew, Sinnamon, and Turkot described a method for the preparation of a grape juice powder in *Food Technol. 8* 27 (1954).

The juice is concentrated to 85 deg. Brix by rapid evaporation under high vacuum rather than to 75 deg. Brix as described in a prior paper by Eskew and coworkers. About 50 parts of sucrose per 100 parts of grape solids is added as a sucrose solution of the same Brix as the concentrated grape juice. Actually the amount to add is controlled by the acidity of the juice but the use of considerably less than the proportion stated may make it difficult to retain the essence when drying. If necessary tartaric acid or other fruit acid should be added to give a proper sugar; acid ratio and after the grape essence is added in the proportion to the total solids present, the mixture is dried in a vacuum shelf drier of conventional design but equipped with platens supplied with water whose temperature could be controlled to 200 deg. F.

These investigators found that the use of sucrose was essential for the retention of the restored volatile flavor. It also acts to prevent the production of a scorched molasses-like character.

Eskew and his collaborators were not able at the time of writing their paper to explain the mechanism of the action of sucrose but thought that its ability to prevent the development of off-flavors was due to the dilution of the reacting ingredients of the original juice concentrate by the sucrose.

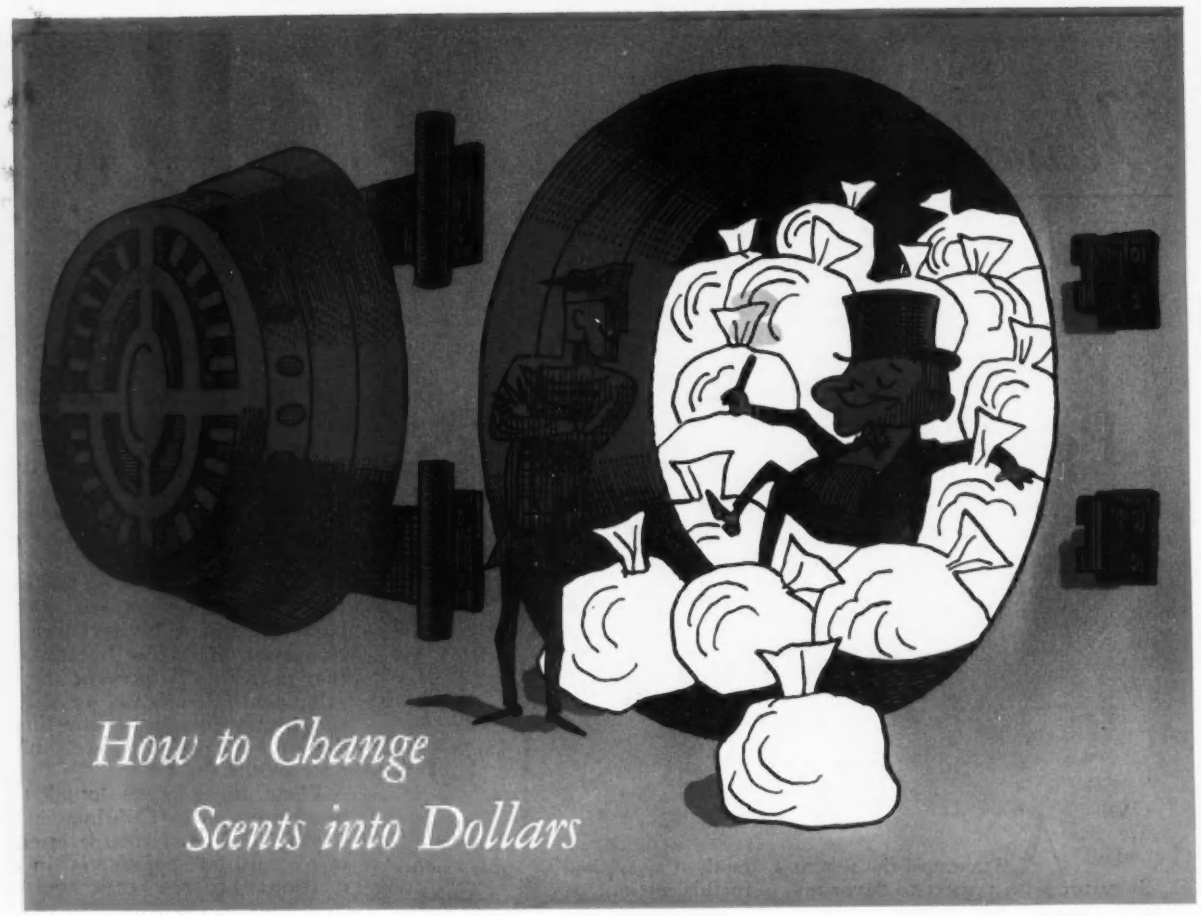
These investigators found that in addition to its usefulness in retaining the added volatile essence, sucrose assisted, apparently, in the reactions between these volatile components and the nonvolatile components of the concentrate. They found that aging or maturing took place when stored at 35 deg. F. for long periods. When the volatile essence and the concentrated juice were stored separately and then were combined just prior to the taste test, the resultant flavor was not as good as that produced by storing the mixed concentrate and volatile essence.

It was pointed out by these investigators that powdered fruit juices are bulkier than concentrated juices of high specific gravity even though the powdered juices are more greatly concentrated. This is a disadvantage which is overcome by advantages such as better keeping quality and superior flavor. The better keeping quality is probably due to the lower moisture content.

Eskew and his collaborators have not finished their investigations and so they caution against placing their method into commercial operation until their experiments have been completed.

Orange Juice Powder

Summer I. Strashun and William F. Talburt of the Western Regional



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Research Laboratory, Bureau of Industrial and Engineering Chemistry, U. S. Department of Agriculture, Albany, California, describe a method for the preparation and packaging of a stabilized orange juice powder. This method is detailed in *Food Technol. 8,* 40 (1954).

In this process concentrated orange juice containing from 60 to 65 per cent of soluble solids was dried to a product containing about 3 per cent of moisture by use of a conventional vacuum shelf drier. The dehydration was made from a liquid film about one-sixteenth-inch in thickness in about 1.5 hours at a pressure of 4 mm. Hg. This pressure is somewhat higher than that used by other investigators.

In this process the drying is conducted in such a manner that the volume of the product is increased some 15 to 20 times. The porous structure thus developed assists in more rapid drying and gives the product a friable character. This makes it easy to remove from the drying surface and easy to form a powder in which form it can be reconstituted readily.

What interests this section of *The American Perfumer* in particular is the incorporation of the flavor into the powder. It is known that nearly all of the characteristic flavor of orange juice is obtained from some peel oil which gets into the orange juice during the extraction step. Since this essential oil is relatively volatile most of it is lost during the two concentration steps by which the powder is produced. For this reason some essential oil must be added to the final powder so that it will have an acceptable flavor. The amount added is such that the reconstructed orange juice contains from 0.006 to 0.01 per cent of recoverable oil.

These investigators used two methods of adding orange oil to the powder. Either terpeneless or cold-pressed orange oil was added in sufficient quantity directly to the feed prior to the drying of the powder to give the requisite amount of flavoring to the finished product. During the dehydration step relatively little of the terpeneless oil was lost but one-fifth of the volume of the added cold-pressed oil was volatilized. Essential oil added in this manner is subjected to the action of oxygen and consequently undergoes the oxidative and deteriorative changes with which we are so familiar.

Since this first method did not give Strashun and Talburt desirable results, they were more disposed to use the following method for flavoring their product. This was a variation of the process for incorporating essential oils and flavoring materials into sorbitol, a process for which a patent was obtained by Griffin (U.S. 2,566,410, Sept. 1951 and assigned to Atlas Powder Co.).

Molten sorbitol was heated to 392 deg. F. (200 dg. C.) to remove water and the orange oil was added slowly with rapid stirring. The mixture was supercooled to about 194 deg. F. (90 deg. C.). They found that as much as 10 per cent by weight of essential oil could be added to the sorbitol. The emulsion of essential oil in the liquid sorbitol was permitted to crystallize and then was broken into granules of about 10 to 20 mesh. The oil-in-sorbitol granules were added to the orange powder just before packaging.

These investigators point out that the feed juice should contain a minimum amount of essential oil when it is intended to use oil-in-sorbitol granules for the flavoring of the orange juice powder.

In-Package Desiccation

In both methods one of the more important aspects to consider is that the moisture content of both the grape juice powder and the orange juice powder were reduced to a very low value. It was found that this low moisture content served to aid in the preservation of the flavor.

In both investigations in-package desiccation was accomplished by the use of a hermetic container in which a quantity of desiccant sufficient to absorb all of the residual moisture was placed in a separate paper container.

Certain phases of in-package desiccation have been patented, for instance that of Cotton and Schroeder (U.S. 2,520,878, Aug. 1950; assigned to National Research Corp).

It may be possible for your editor to discuss in-package desiccation and flavor problems in greater detail in some subsequent issue.

Flavored Notes

ANN M. Mylne and Virginia S. Seamans, Western Regional Research Laboratory, Bureau of Industrial and Engineering Chemistry, U. S. Dept. Agriculture also participated in the study concerning stabilized orange juice powder. They studied the changes occurring during storage in detail and these are described in *Food Technol. 8,* 45 (1954).

Every food processor can use a food technologist to advantage. One of the advantages often claimed for the employment of such technical personnel is that flavors can be prepared on premises and thus a saving in costs can be obtained. Some food technologists are also flavor technologists but it is an error to think that in every instance it is best to make ones own flavors rather than purchasing them from a firm specializing in such products.

I noted a query in the *Rural New Yorker* concerning the use of pollen from a second plum variety for commercial fruit production and the effect on flavor. The answer stated, "Fortunately 'aiding nature' has no effect on the flavor of the fruit. The particular flavor which a variety has is inherent in that variety, although it may be affected by environment, such as temperature. Usually regions that have temperatures which do not exceed 100 deg. F. and do not average below 58 deg. to 60 deg. F. during the summer months produce plums with a good flavor. A cool summer produces a plum with too acid a flavor."

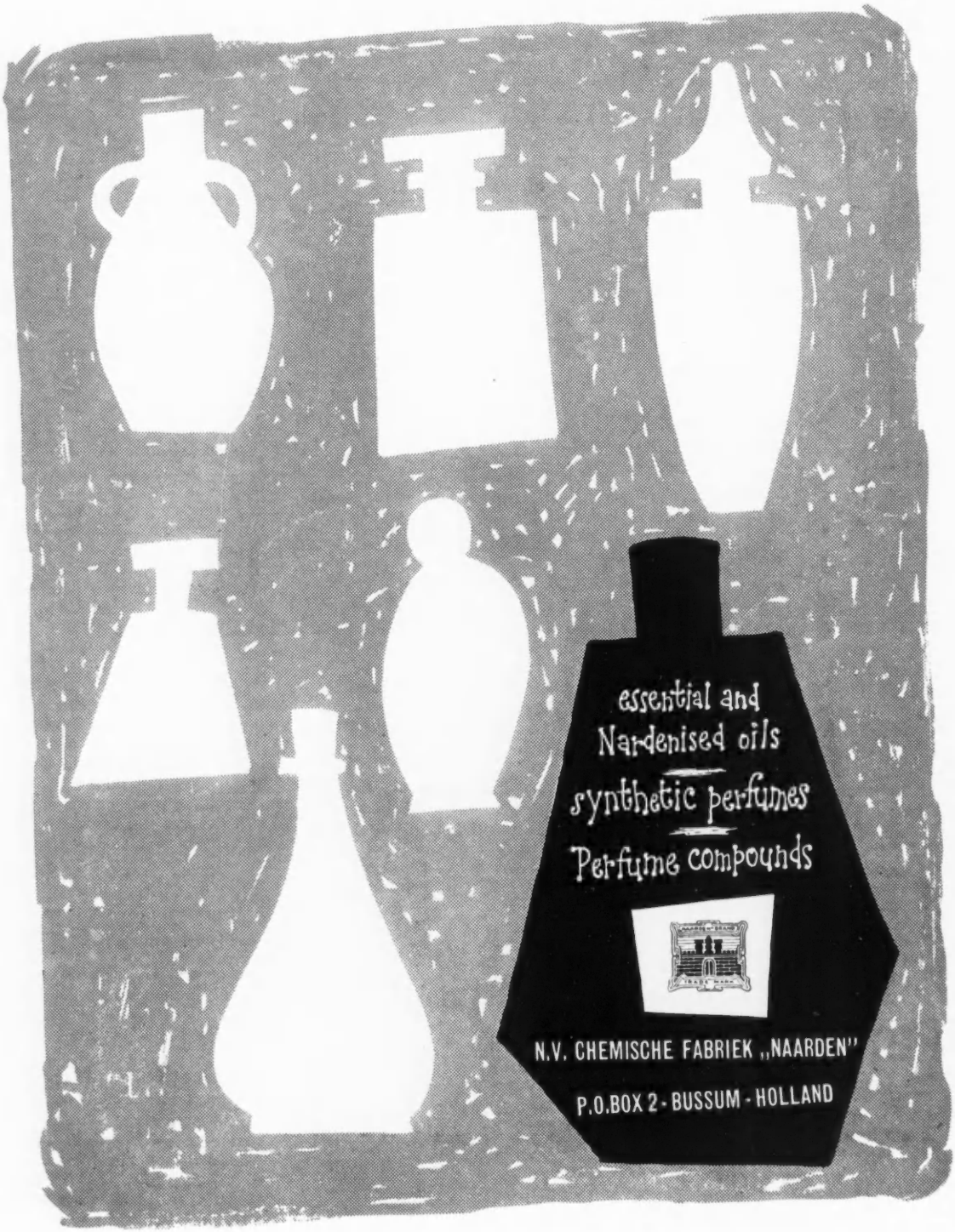
When a plant has the machinery to make a flavored product such as a cocoa powder, it can also be used to make a powdered flavor but thought must be given to the fact that the flavoring material will affect subsequent batches of powder so that it may not be wise to take this apparent short cut.—*M.B.J.*

U.S. International Gift and Fancy Goods Show Aug. 22-27

The second U. S. International Gift and Fancy Goods Show will be held August 22-27 at the Astor Hotel, New York City.

Vending Machines to Dispense Carbonated Drinks in Cans

Carbonated soft drinks in cap-top cans will soon be sold through vending machines, according to plans of Cantroll & Cochrane Corp. President Walter S. Mack has also announced that the company will sell its line of syrup flavors to cup-vending and soda fountain operators throughout the U. S.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Regulatory Problems

in Food Flavoring

(Continued from March issue)

J. W. SALE:*

Fruit Flavors Fortified with Natural Flavoring Ingredients

PUBLISHED formulations for artificial flavors and fortified fruit flavors list the following essential oils, among others, as ingredients: bergamot, cardamon, celery, coriander, geranium, jasmin, lemon, mace, mandarin, neroli, orange, peppermint, pimenta, rose, sweet birch, and wintergreen. One or more of these may be found in widely varying amounts in formulations for apple, apricot, cherry, currant, grape, pear, plum, raspberry, peach, pineapple and strawberry synthetic or fortified flavors. One or more extractions or tinctures of angelica root, celery seed, deer's tongue, orris root, St. Johns Bread, fenugreek, woodruff, rose, trifolium (red clover blossoms), Balsam Peru, benzoin or other plant extractive may be present also. Allison has described the properties of some of these plant extractives. Fortification of true fruit flavors with essential oils and/or plant extractives such as those enumerated above makes flavorings known in the flavoring industry as W.O.N.F. fruit flavors, the letters W.O.N.F. meaning "with other natural flavors." The problem of the regulatory chemist with respect to this class of flavor is to see to it that the product actually has a fruit base which characterizes the article, and that the foods containing such flavors are properly labeled with respect to the constituents. If the additives, rather than the fruit flavor, predominatingly characterize the article and it is labeled with the name of a fruit, it has been our practice to class the mixture as an imitation.

One manufacturer's catalog expresses the situation in these words:

> "A special official ruling permits a flavor to be labeled as above, provided that at least half the flavor strength is due to extractions from the fruit whose name appears in the title and not more than half to other natural flavors, as distinguished from artificial or synthetic flavors.
>
> "The labeling of the food product containing such flavoring must conform to this title if the name of the fruit be declared on the label.
>
> "It is obvious that within the limits of concentration found in our Genuine Fruit Extracts Concentrated, the corresponding FRUIT FLAVORS WITH OTHER NATURAL FLAVORS can be made twice, but no more than twice as strong. . . ."

The "special official ruling" referred to above was an opinion expressed in a letter of August 11, 1939 from the Food and Drug Administration to a flavor manufacturer.

Better commercial practice in the manufacture of these flavors is to use from 25 to 50 pounds of fruit to produce a gallon of finished flavoring.

The purpose of using oils and plant extractives in these flavors should be to restore the flavoring lost during the concentration of the fruit and to make the flavors carry through into the finished food but not to cheapen the products by using the additives to permit excessive dilution.

Imitation Fruit Flavors

OBVIOUSLY all of the constituents listed in Table I that are available commercially, are candidates to fortify true fruit flavors and to make imitation fruit flavors. Many of these are available commercially and the skill of flavor and perfume chemists has produced many additional ones for use in augmenting the flavor of fruits and other natural flavorful foods.

There are many articles in the literature dealing with chemical flavoring constituents. Fortunately, there are available several books in which available information on the subject has been compiled and discussed. Without prejudice to any of the other books on the same subject I will bring to your attention some of the pertinent information in Dr. M. B. Jacobs' book which is of fairly recent publication. This book contains descriptions of synthetic flavoring chemicals and essential oils used, or proposed for use, in many artificial fruit flavors. Included also, are quantitative formulations of the principal constituents in many fruit and nonfruit ester flavoring mixtures. As an illustration of the complexity of these formulations there are listed below several of the synthetic fruit flavors together with the numbers

*Chief, Beverage Branch, Division of Food, Food and Drug Administration, Dept. of Health, Education and Welfare. Address before Assn. of Food and Drug Officials of the U.S., Hot Springs, Ark. June 1953.

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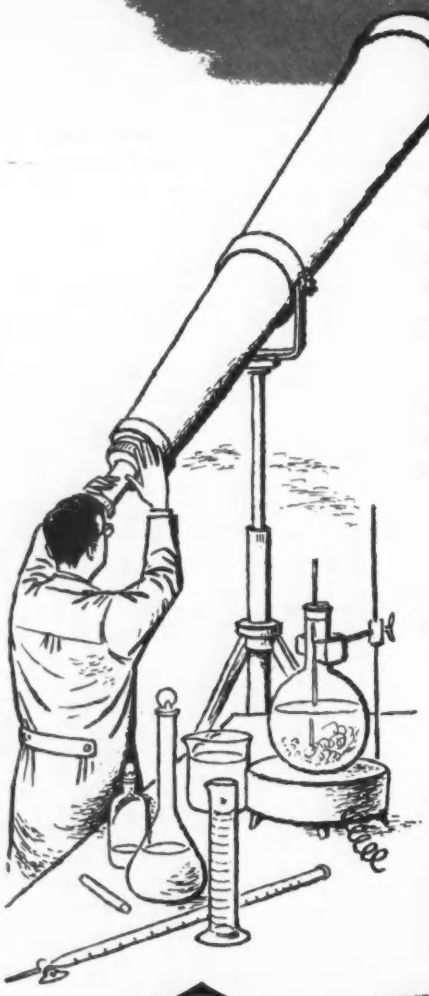

The high quality and uniformity of Heyden Benzyl Chloride have established it as a dependable raw material in the production of essential oils, pharmaceuticals, dyes, resins, plasticizers and quaternary ammonium compounds. Research chemists find this low cost, reactive intermediate useful in the synthesis of new products for many and varied applications.

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of principal and minor components in the quantitative formulas.

Synthetic Flavors	Number of Chief Components	Number of Minor Components	Number of Total Components
Apple	17	49	66
Apricot	26	88	114
Cherry	16	31	47
Grape	18	18	36
Peach	31	83	114

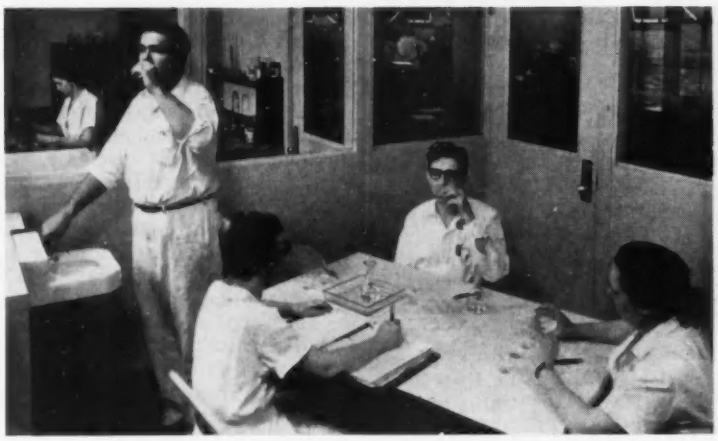
The constituents in the compilations are volatile acids, alcohols, hydrocarbons, aldehydes, esters, ketones, ethers, and complex organic compounds with more than one functional group such as ethers which have another functional group so that they are also alcohols, esters, aldehydes, etc. Included in this group is the widely used synthetic vanillin. A few essential oils are also listed. The esters which are the largest group include formates, acetates, propionates, butyrates, isobutyrates, isovalerates, caproates, enanthates, caprylates, pelargonates, caprates, esters of di- and tricarboxylic acids, benzoates, toluates, hydrocinnamates, cinnamates, salicylates, and anthranilates totalling about 184 individual esters. The esters in the case of the acetates, for example, include, in addition to the typical aliphatic esters, such as methyl, ethyl, etc., up to decyl, the following which may be used in synthetic fruit flavors: citronellyl, rhodinyl, geranyl, linalyl, neryl, terpinyl, santalyl, phenecyclohexyl, benzyl, styrallyl, phenethyl, hydrocinnamyl, and cumanyl acetates. The alcohols in the fruit essence formulations number about 18, the aldehydes 20, the ketones 13, and the ethers 14.

In order to have some knowledge of quantitative flavor formulations, and the role played by the individual flavoring components in synthetic flavors, let us consider Jacobs' examples and his explanations of them which follow: The "neutral" ester mixture is a base to which characterizing flavoring chemicals may be added to produce the desired imitation fruit flavor.

"Neutral" ester mixture base, parts: ethyl acetate 420, amyl acetate 250, ethyl formate 250, amyl butyrate 80, total 1000.

Peach flavor ester mixture, parts: cyclohexyl butyrate 600, ethyl cinnamate 140, benzyl butyrate 140, isoamyl butyrate 70, isobutyl salicylate 20, gamma undecalactone 20, geranyl formate 10, total 1000.

Jacobs points out that the first three components listed above constitute the base, with the ethyl cinnamate and benzyl butyrate serving as fixatives. Gamma undecalactone intensifies the fruity flavor, giving it a characteristic peach aroma. The isobutyl salicylate and geranyl formate contribute a flowery note.



Testing Flavor Principles in Monsanto's Organoleptic Panel Room

Pineapple flavor ester mixture, parts: ethyl butyrate 190, isoamyl isovalerate 810, total 1000.

Raspberry flavor ester mixture, parts: isobutyl acetate 420, isoamyl acetate 275, ethyl acetate 200, ethyl formate 35, benzyl benzoate 25, bromelia 15, vanillin 10, linalool 10, eugenol 6, benzyl acetate 2, geraniol 1, ionone 1, total 1000.

Jacobs explains that the modifying components in this formulation are the vanillin, bromelia, and eugenol; that the linalool, geraniol and benzyl acetate serve to lend a flowery note; and that the ionone serves to intensify the raspberry flavor.

Several flavor manufacturers list in their catalogs the commercially available aromatic chemicals, and include with each name an indication of the kind of flavor it imparts, or relate it to a particular fruit or other natural product, as for example "Allyl esters—pineapple esters," "beta naphthyl isobutyl ether —strawberry odor," "diacetyl-butter flavoring material," "isobutyl acetate—raspberry, strawberry and cherry flavors," "linalyl propionate —in banana."

Incidentally allyl alcohol and probably its esters are toxic substances and unsuitable for food use. Also, we have questioned the use of fluid extract of Carthamus in a doughnut flavor as it is said to be laxative in large doses. It has long been our position that any food product containing a detectable amount of thujone, the poisonous principle in wormwood oil, is to be classed as adulterated.

Commercial flavoring chemicals do not always have the identity indicated by their names. We expected a certain brand of so-called peach aldehye C_{14} to be a mixture of isomers of aldehyde C_{14} but found to our surprise that it was almost entirely gamma undecalactone which is a lactone of hydroxy undecylic acid, a C_{11} acid. The so-called strawberry aldehyde C_{16} was found to be nearly pure ethyl methyl phenyl glycidate. Some manufacturers refer to these chemicals as pseudoaldehydes, a name which is less likely to mislead than peach aldehyde C_{14} or strawberry aldehyde C_{16}.

It may surprise some of you to learn how widely used are some flavoring chemicals which are associated in our minds with one particular natural flavor. We may not think of vanillin as an additive of fruit type flavors but actually it is suitable for fortifying apricot, banana, currant, gooseberry, peach, pear, pineapple, plum, raspberry, and strawberry flavors, and is found in formulations for those flavors.

Benzaldehyde is used not only in fortified and synthetic cherry flavors where it is the characterizing component, but also in apple, apricot, blackberry, gooseberry, peach, plum, raspberry, and quince synthetic flavors.

These synthetics, then, are the reservoir of chemicals from which the flavor manufacturer draws his raw materials, and to which the regulatory chemist must look, in his search for constituents of fruit type flavors, which, if undeclared in the labeling, may serve to misbrand the flavors or food in which they are used. This comment should not be consttrued as reflecting in any way on the usefulness and desirability of wholesome synthetic fla-

voring chemicals when they are properly used. The regulatory chemist merely endeavors to see to it that these materials are not used in a way which results in deception. There will be more discussion of this point when we discuss the labeling of food flavors.

Analytical Procedure

THE best approach, probably, for the regulatory chemist who has the task of examining a suspect sample of a so-called true fruit flavor, is to search for constituents which are not present in the natural flavor, and to determine constituents, which, while naturally present, may be found in the flavor in far greater abundance than would be possible if the flavor were derived entirely from natural sources.

The first step is to make a list of the flavoring constituents which meet the following conditions (a) suitable for use in a flavoring concentrate of the named fruit, (b) constituents for which methods are available, (c) constituents which have been sought for but not found in the named fruit. The listings made herein will assist the chemist in compiling the list. The bibliography which is appended, and the bibliographies contained in the articles cited, will enable him to pursue the subject in greater detail.

Examples of some constituents which will meet these conditions follow: supposing the suspect sample to be analyzed is a "True Fruit Strawberry Flavor," we note immediately from the list of natural constituents of strawberry in Table I that methyl alcohol and acetone were absent. Acetone is not used in synthetic fruit flavors so it is not a candidate for the list. Methyl alcohol does meet the conditions since methyl salicylate, methyl formate, methyl benzoate, mehtyl cinnamate are used in synthetic strawberry flavors and to fortify natural strawberry flavors. Moreover, we have methods for the detection of methanol. There is one flaw in the ointment, however, which the chemist must keep in mind and that is the possibility of methanol being formed in the manufacture of the concentrate by hydrolysis of the pectin. This could occur through the action of the enzyme pectin-methyl-esterase, which may be present in the commercial enzyme preparation used to clarify the fruit juices.

Other candidates for the list in the case of a strawberry flavor are cyclohexyl butyrate, gamma undecalactone, ethyl pelargonate, vanillin, bromelia (beta naphthyl ethyl ether) benzaldehyde, butyl beta naphthyl ether, coumarin, ionone, ethyl methyl phenyl glycidate, isobutyl isovalerate, and geraniol. All of these chemicals, and many more, are listed by Jacobs and others as having been proposed for use in synthetic strawberry flavor. Of those candidates just mentioned, we have methods for the isolation and determination of gamma undecalactone, vanillin, benzaldehyde, coumarin, ionone, ethyl methyl phenyl glycidate, valeric acid, and geraniol.

It is of interest to note the difference in the types of analytical methods available today for the analysis of flavors, as compared with those in use two decades ago. When Wilson (1930) published the first of his series of papers on "Identification of Flavoring Constituents of Commercial Flavors," he employed the common practice of the day to separate the various classes of compounds present, namely: steam distillation, neutralization, precipitation, saponification, simple distillation, evaporation, acidification, ether extraction, alkalization, etc. Using these procedures he separated complex mixtures into fractions containing: non-volatile-acids, aldehydes, ketones, lactones, sugars, etc., and volatile-free acids, aldehydes, ketones, alcohols, combined acids (esters), lactones, anhydrides, phenols, etc. Methods available at that time called for isolation of acids by fractional crystallization of silver salts, precipitation of aldehydes and ketones with carbonyl compound precipitants, oxidation of alcohols to the corresponding acids with subsequent fractionation of silver salts. Here identification depended upon silver determinations, neutralization values, melting points, and other physical properties.

To these Wilson with the assistance of Keenan added more positive identification through crystallographic means, such as refractive indices and other properties determined microscopically on very small amounts of material, which enabled the analyst to identify the more common aldehydes as semicarbazones, beta-ionone as the m-nitrobenzhydrazide, benzoic acid as benzhydrazid, gamma-undecalactone as hydrazino-gamma-undecalactone, etc. Colorimetric methods were also employed for coumarin by condensation with diazo-p-nitroaniline, anthranilic acid ester was diazotized and coupled with sodium-1-alpha naphthol-2-sulfonate, etc.

In the past decade workers have developed partition chromatography as an analytical tool to a point which enabled the chemists of the Eastern Regional Laboratories to use these procedures in the analysis of flavoring constituents of fruits.

In contrast to the former steam distillation procedure, the volatile constituents are now obtained from the fruit juice by vacuum distillation using a fractionating column protected against the loss of low boiling fractions by a trap cooled with dry ice. In this way the distillation proceeds at temperatures low enough to minimize changes in composition of the fruit juice and of the distillate from it.

The essence so obtained is dehydrated chemically, and fractionated into a large number of fractions, thereby reducing to a minimum the number of individual constituents comprising each fraction. A portion of each fraction is then treated with a reagent to form crystalline derivatives of any carbonyl compound contained in it. The crystalline carbonyl derivatives of each fraction of the mixture are then separated into individual compounds by partition chromatography and identified by melting point (including mixed melting point techniques) and by elementary analysis.

A second portion of each fraction is then treated with a reagent to fix the alcoholic constituents in the form of crystalline compounds. These mixtures of crystals are then subjected to partition chromatography to resolve them into individual compounds which are identified by melting point and elementary analysis. The esters are distilled from the alcohol-free mixtures and saponified. The acids which had been combined as esters are then separated by partition chromatography and converted to crystalline compounds, which are identified by melting point and by comparison of X-ray diffraction patterns, while the released alcohols are converted to crystalline derivatives, which, in turn, are subjected to partition chromatography to resolve mixtures into individuals susceptible to identification by melting point and elementary analysis.

(To be continued)

Soap Section

Azelaic Acid as a Raw Material

PAUL I. SMITH

A WORLD surplus of tallow has encouraged researches into ways and means of utilizing it industrially. Investigation of the properties of chemically treated components of tallow, e.g., oleic acid, has yielded interesting results and particular attention has been given to azelaic acid as a new and interesting fatty acid. Azelaic acid is a straight chain dicarboxylic acid produced by oxidising oleic acid, e.g., the Emery process makes use of a chrome acid sulphuric mixture which is continuously regenerated electrolytically (B.P. 604,281). The process produces a mixture of acids consisting largely of prelargonic and azelaic and a number of high dibasic, monobasic and complex oxidised acids. The azelaic acid is extracted by a hot water treatment. The purified acid is of special interest to manufacturers of lubricants owing to the comparative ease with which its chemical structure can be modified to improve the general lubricating properties of a lubricating oil.

Although azelaic acid itself is not of great value as an additive to oils, its derivatives, particularly the esters and glycols are also of outstanding interest.

The soap manufacturer may be interested in azelaic acid and its derivatives for the following reasons:

1. Azelaic acid derivatives possess good lubricating properties and their presence in soap is considered likely to improve super-fatting properties and also to enhance both the polish and appearance of tablets.

2. Azelaic acid derivatives, notably the esters, have a high oxidation stability and excellent compatibility with soaps and ingredients of soaps. The presence of these additives in soaps is not liable, therefore, to cause any discolouration or have any deteriorating effect on the appearance of the finished soap.

3. Esters of azelaic acid might profitably be examined as vehicles for medicinal compounds where these have to be incorporated in soaps.

Before the esters or other derivatives of azelaic acid are used in soap manufacture they need to be appraised from a dermatological standpoint, in order to discover if they are liable to cause skin irritation. This is an obvious safeguard and one that every potential soap user would want to have carried out under medical supervision.

Detection of Metal Particles In Soap

A new electronic device is now available that enables the soap manufacturer to detect the presence of metallic particles in soap products. This device serves two most valuable purposes, it provides 100 per cent inspection for metallic particles, both magnetic and non-magnetic, and enables the plant supervisors to detect immediately any breakdown to plant resulting in metal entering the soap.

The R.C.A. electronic metal detector is designed to locate minute as well as larger pieces of metal. The soap or other product being inspected is conveyed by belt or other means through the inspection aperture. Here it is screened by a high frequency electro-magnetic field formed by scientifically designed coils embedded in plastic panels at the top and bottom of the aperture. If metal is present, it causes a reaction which is detected and amplified by a sensitive electron amplifier. This amplifier triggers a signalling device (such as a bell or lamp), an automatic ejection or marking device, or a combination thereof, whichever is desired. As the detector only consumes 140 watts, the power costs of running the machine are negligible.

Colgate-Palmolive Wins Injunction Against Colgate Labs.

Colgate-Palmolive Co. has been granted a temporary injunction in the Superior Court of New Jersey, Chancery Div., enjoining a firm known as Colgate Labs. from using the Colgate name. Colgate Labs., with a Jersey City post office box number for its address, advertised a product called Stermalan for the treatment of Psoriasis in a New York daily on March 10. There is no connection between the two companies.

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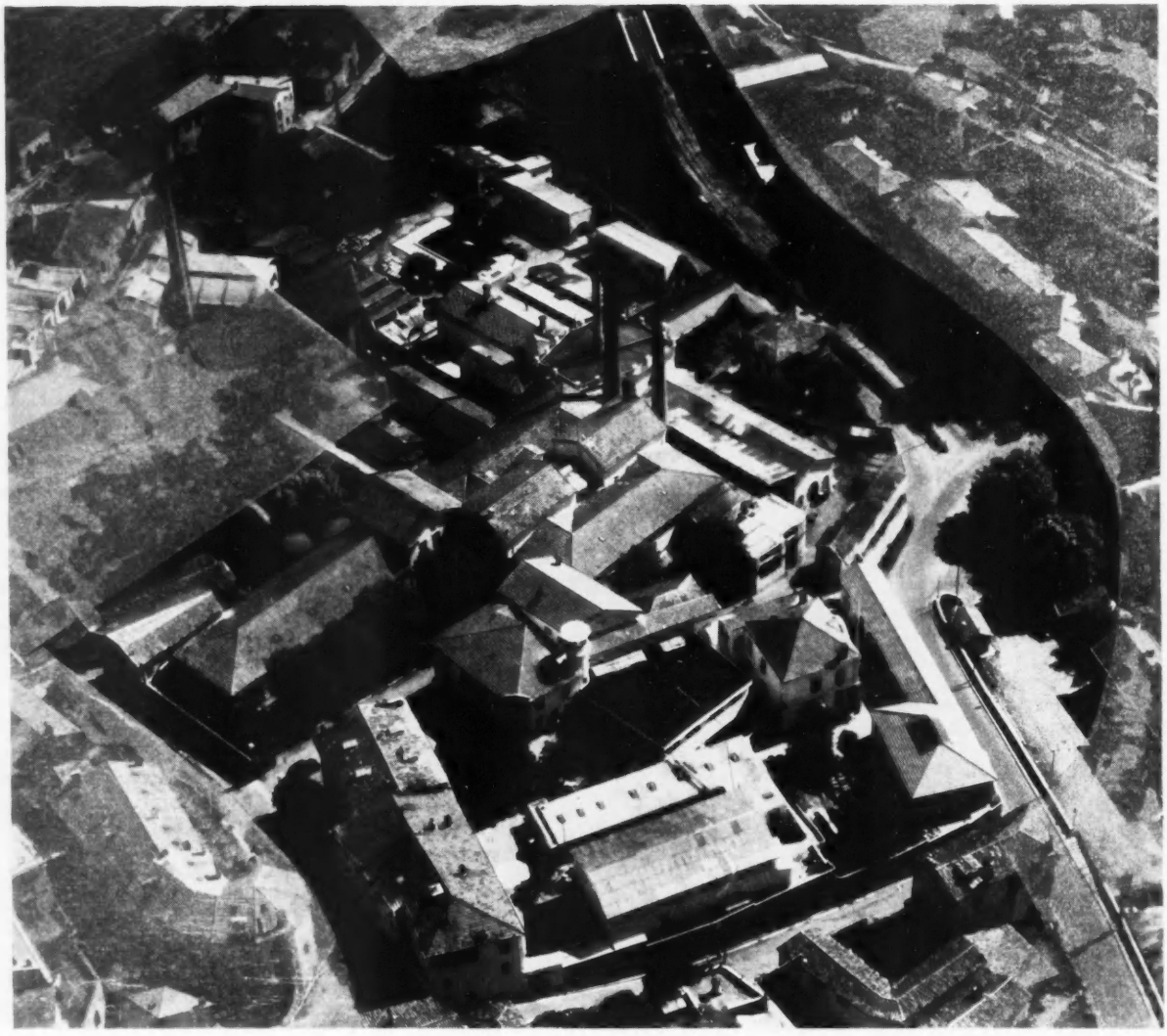

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NEWS and EVENTS

Ralph P. Lewis Buys Cosmetic Firm of Jaquet, Inc.

Ralph P. Lewis has purchased the cosmetic business of Jaquet, Inc., it has been announced. Previous to assuming ownership of this business, Mr. Lewis was executive vice-president of Lucien Lelong. Prior to that he was president of Harriet Hubbard Ayer and was connected with Elizabeth Arden. The line, which has long been distributed nationally on a selective basis, will continue the same pattern of distribution. Jaquet will have offices in New York and Chicago.

Harriet Hubbard Ayer to Drop Home Sales

Harriet Hubbard Ayer will drop its entire home servicing department, and plans to test new products in several areas. The company was recently acquired by Nestle-LeMur Co.

American Society of Perfumers Occupies New Quarters

Offices of the American Society of Perfumers, Inc. are now located on the 15th floor at 601 West 26th St., New York 1, N.Y.

Canadian Toilet Goods Mfrs. to Meet in U.S. June 14-16

The 26th annual general meeting of the Toilet Goods Mfg. Assn. of Canada will be held June 14, 15 and 16 at Whiteface Inn, Lake Placid, New York.

Federal Agency Fixes 20-Day Discount Period in Bids

A standard discount period of 20 days in all bid contracts coming under their administration has been announced by the federal General Services Administration, effective July 1. Bids on a shorter period will be disregarded, and no special consideration will be given to discount periods of more than 20 days.

William G. Mennen (extreme right), president of the Mennen Co., receives the first copy of "The Mennen Story," published by McGraw-Hill in honor of the company's 75th anniversary. Looking on, from left to right, are George Mennen, vice-president in charge of manufacturing, and William Mennen, Jr., executive vice-president of the Mennen Co., representing the third generation of the family operated business. Presenting the book to Mr. Mennen is William Larned, vice-president of McGraw-Hill Publishing Co.

I.C.C. Stops Surcharge on Small Truckloads

The Interstate Commerce Commission has upheld the petition of the National Small Shipments Traffic Conference and has ordered cancellation of the $1.50 applicable on truckload shipments of less than 5,000 pounds in the Central States territory as unjustly discriminatory and unreasonable, the Washington office of the N.B.B.M.A. reports.

Copper Tan, Inc. Changes Name to Desert Tan Co.

Copper Tan, Inc. has changed its name to the Desert Tan Co. In the future, all Copper Tan Suntan products will be marketed under the trade name, Desert Tan.

John H. Breck, Inc. Considers Affiliate Plant in Italy

The possibility of setting up an affiliate company in Italy to manufacture as well as to distribute Breck preparations was discussed by visiting Countess Clotilde Villa Oddone, of Milan, Italy, with officials of John H. Breck Inc. Director of the Society of Italian Representatives for Foreign Perfumes, which handles the marketing of Breck preparations in Italy, she spent several days at the West Springfield, Mass. plant.

U. of Pittsburgh Sponsors Conference on Automaton Use

"Automaton and the Retailer" was the subject of a conference by the School of Retailing of the University of Pittsburgh on March 26. Leaders in this new technology viewed the application of the automaton to paper work, retailing, merchandise handling, and research or problem solving.

How *Oil of Lemon* from Cyprus has reached world markets

CYPRUS, a beautiful island in the Mediterranean, is a place of warmth and flowers. Rose, Bay Laurel, Myrtle, Cistus, Sage, all thrive in the perfect weather there. But the ideal climate and fertile soil combine to create especially favourable conditions for citrus fruit of a very high quality, the export of which, before World War II was the island's chief source of income.

A problem solved with imagination

When the war brought this export trade to a standstill the firm of Lanitis Bros. tackled the problem with imagination and foresight. They saw an opportunity to revolutionize their industry by treating the fruit, on the spot, for its essential oils.

They organized a visit to the U. S. and made a detailed study of production methods there. A coast to coast survey of U. S. factories gave them a thorough understanding of the industry. They bought and shipped to Cyprus the finest modern American machinery that could be obtained, including extractor plant and equipment for deterpenation, distillation and expression. The new industry was under way!

Modern production methods

Lanitis Bros., coldpressed Lemon Oil, produced in an ultra-sanitary plant, utilizing the latest, most modern American machinery, compares favorably with any in the world. It conforms to all U.S.P., and B.P. specifications, its citral content averaging 4%. An annual production in Cyprus of 45 million Lemons permits Lanitis to process about one-third into juice and essential oil. Constant laboratory supervision during production assures uniform quality and purity.

Soluble lemon essences, lemon oil extracts and lemon pastes, as well as the pure oil of lemon, are all produced by Lanitis Bros. and exported all over the world to soft drinks manufacturers, confectioners, candy and ice-cream manufacturers. It is welcomed for its low cost as much as for the excellent quality.

Out of the disaster of World War II Lanitis Bros. have created a vast new industry, which is still developing, and have built up an enviable reputation in the world market for producing the very finest essential oils.

Now is the time to be ordering your Lemon Oil!

For full information and samples of LANITIS essential oils please write to

THE CALVERT MILLS CO.

44 Whitehall St., New York 4, N. Y.

Exclusive U. S. Representatives

LANITIS BROS. LIMITED

17 Roosevelt Avenue, Limassol, Cyprus

T.G.A. Announces Tentative Program for May 11-12 Meet

The Toilet Goods Assn. has announced the following tentative program for its annual convention, May 11, 12 and 13, Waldorf-Astoria Hotel, New York:

Tuesday, May 11

The morning session starts at 10 A.M.: President (Davis Factor) opens the meeting; report of the treasurer, Philip C. Smith; president's address (by Davis Factor); report of the executive vice-president, S. L. Mayham; election of officers.

12:30 P.M. luncheon, featuring the presentation of the Charles S. Welch Plaques, by Joseph Keho and of the Industry Golf Tournament Trophies by Paul Forsman.

2:00 P.M. Two panels, one consisting of women and one consisting of men in similar executive positions, such as buyers, advertising copywriters, salesmen, demonstrators, etc., to discuss "Marketing and Merchandising." Pierre Harang, Houbigant Sales Corp., will be moderator of the women's panel; moderator of the men's panel will be a leading woman executive in the industry.

Wednesday, May 12

The morning session, starting at 10 A.M., will feature a discussion of the Federal Trade Commission by a prominent industrialist not engaged in the cosmetic industry, and an address by Edward F. Howrey, chairman of the Federal Trade Commission.

Luncheon, starting at 12:30 P.M., will feature an address by CBS' Washington, D.C. reporter Griffing Bancroft.

A closed meeting for manufacturers will start at 2:30 P.M.

Thursday, May 13

The Scientific Section will meet at 10 A.M. The program has been jointly arranged by the American Society of Perfumers, Inc. and the Scientific Section. Discussions will be on the New Lauryl Alcohol Sulfates, by Serge Giers, executive vice-president and technical director American Alcolac Corp.; Installing Statistical Controls in Toilet Goods Manufacturing, by Martin A. Brumbaugh of Bristol Labs., L. B. Dobie and W. C. Frey of Bristol-Myers Products Div.; and The Acid Mantle of the Skin, by Otto Jacobi and Herbert Heinrich, of Kolmar Research Center.

A vice-chairman will be elected during the subsequent business meeting.

The Annual CIBS Awards will be presented by William Fairhurst during the luncheon, which will start at 12:30 P.M.

The afternoon meeting, starting at 2:30 P.M., will feature papers on Recent Progress in Dor and Olfaction-Possible Mechanisms, by Paul G. I. Lauffer, George W. Luft Co., Inc.; on Some Aspects of Soap and Detergent Perfumery, by E. D. Kilmer, Lever Brothers Co.; on Perfuming Aerosol Products, by R. A. Foresman, aerosol consultant, and Raoul Pantaleioni, of van Amerigen-Haebler, Inc.; and Preliminary Investigation of the Application of Infrared Spectroscopy to Perfume Materials, by Ernst T. Theimer of van Amerigen-Haebler, Inc., and Stanley Freeman, of Benzol Products.

Madame Helena Rubinstein (second from left) with some of her guests at the cocktail party she gave in her Park Avenue home to honor Canadian demonstrators who were winners in a special sales contest held there celebrating the 25th anniversary of the Canadian branch. A three-day training school and a round of theatre parties highlighted the week in New York.

Lady Esther, Ltd. Stops Toronto Plant Production

The Toronto, Ont., Canada, plant of Lady Esther, Ltd. will be discontinued as a manufacturing unit of the firm, Dr. Joseph Schultz, Lady Esther president, has announced. The production formerly conducted there will be carried forward at the Zonite Products Corp. plant, St. Therese, Que.

Lady Esther became a wholly-owned division of Zonite Products Corp. last December.

T.G.A. Adopts Minimum Standard for Carnauba Wax

The T.G.A. has announced Standard No. 57 as minimum standard for carnauba wax.

Study Views Effect of Color on Impulse Buying

Colors in relation to impulse buying is the subject of a study made by the color research laboratory of the Sun Chemical Corp. About 75 per cent of volume of impulse buying is of merchandise in three or four specific colors, according to the report: ivory, pale green, blue, pink and yellow have continuing popularity, and continue to hold the bulk of the market, according to the study. The reaction of colors was seen as purely emotional, making color important in impulse buying.

Lemmermeyer Paintings on Exhibit in New York Bank

Michael Lemmermeyer of Aromatic Products Inc. whose exhibit of a selection of his paintings at the Chemists Club attracted much favorable comment, has another exhibit of his work at the Empire City Bank, Fourth Ave. and 33rd St. New York. It consists of five paintings in oil covering the range of portraiture to rural and marine studies. As usual the paintings are well executed, and the color is handled with skill and genuine artistry.

Heyden Chemical Co. Net Sales in 1953 were $23,482,483

Heyden Chemical Corp. in 1953 had consolidated net sales of $23,482,483. Net profits were $1,242,080.

Report on Enzymes in Dentifrices to Start S.C.C. Meet

The technical program of the Society of Cosmetic Chemists' May 14 meeting will lead off with a paper on Enzyme Inhibitors for Dentifrices, to be presented by Dr. R. S. Manly, of Tufts Dental School.

Dr. Manly, well-known dental researcher, has been conducting studies in this field for some time. The dental profession and the dentifrice manufacturers are understood to be awaiting this paper with considerable anticipation.

The meeting, to be held at New York's Biltmore Hotel, will present the following program:

Enzyme Inhibitors for Dentifrices, by R. S. Manly, Tufts College Dental School; Theory of Viscosity, by W. B. Brookfield, Brookfield Engineering Labs.; What Management Expects of Research, by Ray Stevens, Arthur D. Little, Inc.; What Research Expects of Management, by Walter Hamburger, Fabric Research, Labs.; Calculation of HLB of Polyethylene Glycol Fatty Acid Esters, by W. C. Griffin, Atlas Powder Co.; The Chemistry of the Disulfide Linkage, by Gerald Oster and N. A. Rosenthal, Polytechnic Institute of Brooklyn; Lipsticks: Their Formulation, Manufacture and Analysis, by A. L. Fishback, Oxzyn Co.; and Experiments on the Epidermis of Animals of Value to the Cosmetic Chemist, by E. O. Butcher, College of Dentistry and the Graduate School of Arts and Science, New York University.

Van Dyk & Co., Inc. Elects New Officers

Van Dyk & Co., Inc. directors have elected the following officers: president, Mrs. S. Isermann; vice-president and treasurer, Howard Isermann; vice-president and sales manager, Walter Mueller; secretary, Miss H. V. Shanahan. Mrs. Isermann is the widow of the late Dr. Samuel Isermann, a co-founder of the company, and a pioneer in the development of the American synthetic aromatic chemicals industry.

Attacks Wild Advertising Claims for Dentifrices

"No significant reduction in tooth decay or gum disease can be expected from any of the toothpaste currently available to the public," Dr. John T. Flynn, president of the Dental Society of the State of New York recently asserted at the society's monthly scientific meeting.

Attacking "persuasive but untruthful claims of the advertising writers," he specifically included in his remarks all dentifrices containing antienzyme preparations, chlorophyll and ammonium.

Federal Government to Freeze Excess Tin Stocks

The government will freeze excess tin stocks it holds and expects to acquire, the State Department has announced. It also has decided not to sign the International Tin Agreement drawn at Geneva last December.

Connecticut Chemical Research Trailer Fleet Delivers Freon

Connecticut Chemical Research Corp. has received the first of a fleet of tank trailers especially constructed for transporting Freon and Genetron liquefied gas propellents used in its aerosol products. The newly designed trucks have a capacity of 35,000 lbs. Up to now the largest quantity of the propellents available in a single container was one ton.

Increasing production of many pressure-packaged lines in the household, drug, toiletry and industrial fields has prompted the CCRC trailer fleet development to expedite handling of the propellent, according to A. O. Samuels, president of the company. The company recently announced domestic expansion to 250,000 units daily and broadening of its foreign production to include plants in England as well as Canada.

Mary Chess, Inc. to Distribute Peggy Sage Line in U.S.

Mary Chess Inc., New York City, has taken over the sole distributorship of the Peggy Sage cosmetic line in the United States, according to a joint announcement by Miss Peggy

Peggy Sage, president of Peggy Sage Inc., greets (right) Joseph A. Danilek, president of Mary Chess Inc. At the left is Northam Warren Jr., vice-president and general manager of Northam Warren Corp.

Sage, head of the company bearing her name, and Joseph A. Danilek, president of Mary Chess, Inc.

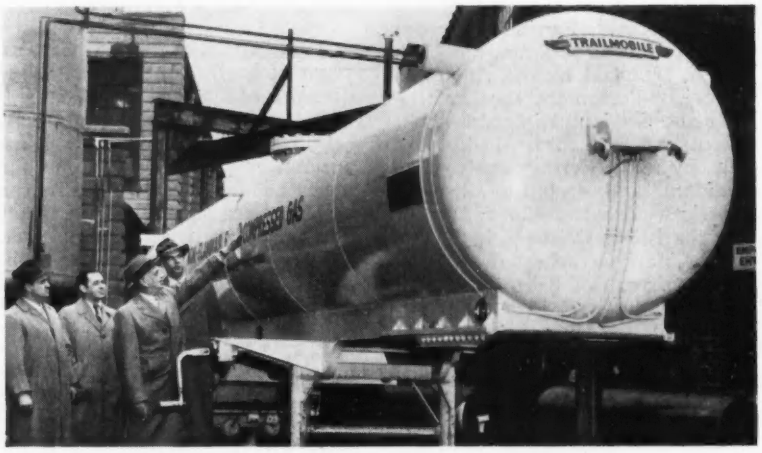
The line will be distributed under the name of a new company, the Peggy Sage Sales Corp., which will be located in New York City.

Items in the two lines are not competitive.

Plans call for intensified sales promotion and an increased advertising budget for the Peggy Sage line.

Coty Stops Dropshipping of Promotion Deals to Druggists

Coty has abandoned its policy of dropshipping its promotion deals to retail druggists. It is also reported to be planning closing its Fifth Avenue office in New York.



First of a fleet of tank trailers transporting aerosol propellents.

KOMMON/ SCENTS!

With so much labeling in political circles today, a course in advertising seems as desirable as one in law for the young hopeful. Where once issues were decided in terms of right and wrong, they are now resolved, unsatisfactorily, as "right" and "left."

• • •

Prominent in the list of those who talk about security instead of securing indictments is Senator McCarthy. But in tangling with President Eisenhower Joe's biggest Red presentation is his own embarrassed face.

• • •

The Democrats' Stevenson, of course, is not without his own ability to coin a phrase. He sounds like a cross between Douglas Fairbanks, Jr. and Ronald Colman but hits harder than B. S. Pulley.

• • •

Fellers with the biggest satisfaction must be ex-Presidents Hoover and Truman. Between what the Democrats have said about Hoover and what the Republicans are saying about Truman, both gentlemen are in a position to publish their statements profitably instead of in the Congressional Record.

• • •

Somewhere in all the squabbling the Russians must be wondering if there's a difference between Democracy and anarchism. One tenth of the kind of criticism levelled against Truman or Hoover in Russia has made firing squads a basic industry.

• • •

Bright light in the scrap, of course, is the final confirmation of Earl Warren as Chief Justice of the United States Supreme Court. For too long, though, most of us were wondering whether the truly creditable Warren was being considered for confirmation as a Jurist or conviction as a suspect.

• • •

But the Cosmetic Industry continues its detached view of things political. Name calling is regarded as vile, reprehensible, vicious, intolerable and otherwise offensive. Except, of course, between partners.

George Fiedler

KELTON

Cosmetic Company

230 West 17th Street, New York 11, N. Y.

Private Label Manufacturers Exclusively
Covered by Product Liability Insurance

AVAILABLE FOR
IMMEDIATE SHIPMENT

"THIO"

(AMMONIUM THIOGLYCOLATE)

HIGHEST QUALITY
(Meets Highest Standards of the Industry)

COMPETITIVELY PRICED

ORDER TODAY FROM . . .

NORCO

PRODUCTS COMPANY

EAST ONTARIO AND BATH STS.
PHILADELPHIA 34, PA.

HERITAGE IN CHEMICALS SINCE 1873

Guenther Tells Perfumers About Latin American Oil Prospects

Many of the old established sources of essential oils were disrupted as a result of World War II, particularly those in the Far East which could not at that time be depended upon to supply us uninterruptedly Dr. Ernest Guenther reported in some cogent preliminary remarks to an illustrated lecture he gave at the March meeting of the American Society of Perfumers.

As a result of the war there have been attempts to establish an essential oil industry in various areas of Central and South America. Before any of these can be successful, Dr. Guenther pointed out, certain problems must be solved. To begin with proper planting material must be procured—often a tedious task. Then proper ecological conditions must be found—and this can be done only through long and costly experience since factors of soil and climate must be thoroughly investigated. Moreover the producer must either possess or acquire "know how"; for without it he may fail completely. Then labor must be sufficiently cheap to make production profitable. In a continent which is becoming more industrialized and where wages, even if slowly, are going up, it is difficult to attract workers to a seasonal and low paying industry.

More important than any of these is the fact that farmers themselves will not grow aromatic plants as long as more staple crops are more profitable. Most South American countries still import a large part of their food requirements—which means that native growers can command high prices for crops necessary to the economy. Against these conditions the prospective producer of essential oils finds it difficult to make headway. It seems likely therefore that prices for Latin American essential oils will go up steadily as the area becomes industrialized and as the standard of living improves.

Following his preliminary remarks Dr. Guenther gave the large audience the first showing of his new color pictures taken on his recent extended trip through Mexico, Guatemala, Panama, Peru, Chile, Argentina, Brazil, France and Italy. The pictures were selected from his new library of about 500 kodachromes. The lecture which accompanied the showing of the pictures was semi-technical and exceedingly interesting.

President Everett D. Kilmer presided at the meeting. Newly elected members were introduced and it was announced that the Association would take part as such in the afternoon sessions of the Scientific Section of the T. G. A. in May. Pierre Bouillette was then introduced and with his usual skill and humor introduced his old friend Dr. Ernest Guenther. While interspersed with humor which was hugely enjoyed, Mr. Bouillette pointed out tersely and graphically the many accomplishments of Dr. Guenther as a linguist, as a scholar and chemist, as a world traveler, as a scientist, as a photographer and as an author. Concluding his remarks he referred to Dr. Guenther as "Mr. Essential Oil Himself," a term, incidentally, that is likely to endure.

Edward A. Sport Laboratory On Gretchen Jackson Radio Show

Lady Hilda lanolin hair refiner, manufactured by the Edward A. Sport Laboratory, South Weymouth, Mass. is being advertised on the Gretchen Jackson show on radio station WBMS in Boston five days a week as a permanent feature of the company's advertising campaign.

Gretchen Jackson

Sees Use of Canadian Moss as Perfume Base

Canadians in Alberta and British Columbia, Canada, are considering cultivating moss on the bark of trees for export to Grasse as perfume base, according to Georges Fuchs, of Fragonard, Grasse. This development is the outcome of the disappearance of the Yugoslavian market, he asserted during a recent visit to Canada.

Castoreum, the gland product used to fix perfume essence, is already being obtained from Canadian beavers, he reported.

45th Annual FEMA Convention: May 16-19 in New York City

Chemicals in food, vanilla beans, business trends, essential oils and other subjects will be thoroughly discussed at the 45th annual convention of the Flavoring Extract Mfrs. Assn. of the United States, scheduled to be held May 16 through 19 at the Hotel Biltmore, New York City. Panel programs have also been arranged. Robert Krone, chairman of the convention committee, has announced that speakers will include Louis Bohmrich, of the United Nations; Miss Bernice Connor, director of editorial liaison, *Ladies' Home Journal;* Fred Bell, executive vice-president, National Automobile Dealers Assn.; Robert C. Hibben, executive secretary, International Assn. of Ice Cream Mfrs.; Dr. John L. Barnhart, technical director, Dairy Industries Supply Assn.; Dr. G. G. King, scientific director, Nutrition Foundation; Dr. S. Sherwood, Sterwin Chemical Co.; G. J. Williams, Dow Chemical Co.; and Dr. Bernard L. Oser, Food Research Labs.

In addition, there will also be addresses by members of the Vanilla Bean Assn., the Essential Oil Assn., and a report by Harold Janovsky, chairman of the association's Scientific Committee.

Entertainment features will include a Hospitality Party on Sunday afternoon, May 16; on Monday, a convention luncheon, a golf tournament at Baltusrol Golf Club, Springfield, N.J., or a trip through the United Nations' Buildings for ladies and non-golfers. This will be followed by dinner and an evening of entertainment for all at the Latin Quarter.

Tuesday, following the morning session, will feature an association luncheon and, following the afternoon session, a President's Reception in the Fountain Room, then a Dinner-Dance.

Wednesday, the Chemists' Breakfast will be first order of business. At this time there will be an informal discussion of various technical aspects of the extract business, with special emphasis on the FEMA research program.

Members of the convention committee are: Robert Krone, Fritzsche Brothers, Inc., chairman; Chris Christensen, Chas. Pfizer & Co., Inc., entertainment; F. J. Lueders, George Lueders Co., golf; Charles P. McCormick, McCormick & Co., program; and R. W. Symmes, Baker Extract Co., registration.

APRIL

Sampler

NEW DUAL-USE COUPON
for
YOUR CONVENIENCE
for

1. ***Requesting Information or Literature***
2. ***Ordering Samples***

The handy coupon on the third page of the Sampler Section is divided in two sections. As you will see, one section is to be used *only* when further information and literature is wanted. The other section is for *ordering* Samples.

Antiseptic skin cleansers. M. M. Maglio and J. M. Hannegan (*Soap*, 1952, **28**, No. 11, 38—41, 135).—In controlled hand-washing tests, a formulated, antiseptic, powdered, industrial skin cleanser was very much superior to bar soap, was much superior to the control powder without antiseptic, and was equal to a special liquid hospital soap (Septisol, containing 0.75% of G11 and 2% of soap) in bacteriostatic action. G. Helms, through *Brit. Chem. Abs.*

Toxicity and allergy. — Oleon (*Rech. Roure-Bertrand Dupont*, 1952, No. 2, 30—37).—The dermatitic effects which can arise from the toxicity of materials used in cosmetics, *e.g.*, hair removers, is discussed. The pH of soaps and the use of thioglycollates are examined from this view-point. The subject may become allergic to such compounds and complaints like the œdema of Quink or eczema may be caused. The problem is complicated by the fact that the subject may be made sensitive to a cosmetic by previous treatment with substances such as sulphonamides or aminosalicylic acid. Before applying cosmetics, a test for allergy should be given on a degreased portion of the neck. Some remedies for some of the dermatitica and allergic complaints are mentioned. R. H. Peters, through *Brit. Chem. Abs.*

Cork in the perfumery industry. I. Ribas-Marqués (*Industr. Parfum.*, 1952, **7**, 265—268).—Saponification of cork gives a no. of substituted fatty acids useful in perfume synthesis, in particular, octadecane-9 : 10-diol-1 : 18-dicarboxylic acid which has been used in the synthesis of civetone. K. Foulkes, through *Brit. Chem. Abs.*

516—AMBERGRIS W

Provides superior fixing and stabilizing qualities together with a fine deep amber note very close to that of genuine amber.

Per Pound—$28.00
1 oz. Sample—$1.85

SCHIMMEL & CO., INC.
601 West 26th St., New York 1, N. Y.

517—AMBRENE RHODIA EXTRA CONC.

A natural distillate of Gum Labdanum completely soluble in alcohol. An excellent fixative for amber, chypre, and oriental fragrances.

Send for Ambrene Bulletin.
1#—$40.00 **Trial ounce $3.00**

RHODIA INC.
230 Park Ave. **New York 17, N. Y.**

518—DR. HILARY SAYS— CIVET C. M.

after 56 years
still the best artificial civet available
$4.00 per Pint
equivalent to 10% tincture
of natural civet
4 oz. sample $1.00

CRESP MARTINENQ
369 Third Ave. **New York 16, N. Y.**

519—CUIRALIA FA-2128

A Warm, heady, very rich odor. A remarkable additive whenever you are seeking a leather note.

Price per lb. $30.00

ROURE-DUPONT INC.
366 Madison Avenue **New York 17, N. Y.**

Cinnamon oil analyzed by the salicylaldehyde reaction. S. Collett (*Mfg. Chem.*, 1952, **23**, 411—412).—A colorimetric method has been developed for the assay of cinnamic aldehyde in cinnamon and cinnamon bark oils using the salicylaldehyde reaction. Prior to the assay, eugenol must be removed from the oil or high results are obtained, due, presumably, to the conversion of eugenol into *iso*eugenol, followed by oxidation of the latter to vanillin under the conditions obtaining during the assay. The results obtained agree well with those obtained gravimetrically using 2: 4-dinitro-phenylhydrazine, but are slightly lower than those obtained using the B.P. titration method. E. Tyrrall, through *Brit. Chem. Abs.*

Trend of development in the soap industry. T. W. Breaden (*Perfum. essent. Oil Rec.*, 1952, **43**, 324—328).—The older type "figged" and "mottled" soaps have gradually disappeared and few bar soaps now contain <60% of fatty acids. Perfumes have tended to become more carefully selected in toilet soaps and certain germicidal soaps are claimed to have high efficiency. The newer synthetic detergents are becoming increasingly important. K Foulkes, through *Brit. Chem. Abs.*

Additives in vegetable waxes. II. C. J. Marsel, C. S. Treacy, H. Brenner, and F. De Long (*Soap*, 1952, **28**, No 12, 181—185). Adulterants in carnauba wax can be detected by i.r. absorption spectra. An additive-enriched extract shows "excess" bands in the normal carnauba wax spectra. Data for carnauba wax containing 5% of *(a)* hydrofol glycerides and *(b)* Durez 219 are given. G. Helms, through *Brit. Chem. Abs.*

Milled detergent bar. C. F. Jellinek, R. L. Mayhew, and J. A. Yeager (*Soap*, 1952, **28**, No. 8, 42–45, 161).—A milled, plodded, detergent bar for use in soft, hard, and sea water, and satisfactory in respect of lather, skin detergency, dishwashing, physical characteristics, ease of manufacture, and storage properties, has the composition: tallow soap 47, Sorapon S.F. Conc. 20, Nekal A 20, Aerosol AY 10, carboxymethylcellulose 2, and perfume 1%. G. Helms, through *Brit. Chem. Abs.*

Acid shampoo. A. W. Stephan, Assr. to Natcon Industries, Inc. (U.S.P. 2,599,665, 10.6.52. Appl. 9.3.50).—The shampoo, pH 5·5–6, comprises NH_4Cl (2·7), H_2O (55), Sipon L-20 (liquid dodecyl sulphate) (33·4), and a mixture (8·9%), of H_3BO_3 (4) H_2O (60), 70% aq. D-sorbitol or Sorbo (12 pt.). *Chem Abs. (B).*

Thiocarbonic acid esters in hair-wave preparations. M. del Zoppo, Assr. to A. Parker (U.S.P. 2,600,624, 17.6.52. Appl., 15.3.50).—Compounds, useful as keratin-softening agents in hair-waving prep. *(e.g.,* in aq. solution pH 8–10 containing alkyl- or aryl-amine, viz., $NH_2{\cdot}[CH_2]_2{\cdot}OH$, mixed *iso*propanolamines, morpholine, etc., LiOH, KOH, or Na_2CO_3 and optionally wetting agent), comprise **di(carboxymethyl)** *trithiocarbonate*, m.p. 173–174°, and *dithiocarbonate*, m.p. 136°, *O-ethyl S-carboxymethyl dithiocarbonate*, m.p. 53–54°, and the product, $SC(S{\cdot}CH_2{\cdot}CO_2Na){\cdot}NEt_2$ made by interaction of $SC(NEt_2){\cdot}S{\cdot}NH_2$ with $CH_2Cl{\cdot}CO_2Na$. *Chem. Abs.* (B).

Manufacture of wax candles. Price's Patent Candle Co., Ltd. (B.P. 682,018–9. 8.5.50) (Inventor: D. J. Keogh).—(A) An apparatus is figured and claimed, for use in the high-speed conversion of a rod of wax-covered wick into candles by (B) a method which comprises forcing solid wax through an orifice around a continuous length of wick guided towards the centre of the orifice, without need for cooling, then successively tipping the free end of the extruded rod and cutting off the desired length. F. R. Basford, through *Brit. Chem. Abs.*

Testing disinfectant soaps. H. Pritchard *(Mfg. Chem.*, 1952, **23**, 227–231).—Among disinfectants recently claimed to be suitable for addition to soap are dichloro-*m*-xlenol and the chlorophene compounds (chlorodihydroxydiphenylmethanes). The latter are superior to PhOH in a Rideal-Walker type of test, and to cresylic acid in cup-plate tests for penetration. The disinfectant is added to the soap at the crutching stage, or worked in by milling. To evaluate a disinfectant soap, a modified dilution test to simulate actual washing and rinsing operations, a test to determine its power of penetrating tissue, as well as practical tests, must be carried out. Practical dish- and hand-washing test procedures are described, and a standard definition for disinfectant soaps is suggested. A. M. Spratt, through *Brit. Chem. Abs.*

✶ APRIL

When requesting information and literature or ordering samples check the handy coupon on the opposite page, tear out and mail to the American Perfumer.

520—DIHYDRO JASMONE

Dihydro Jasmone, a veritable synthetic with the prized note of natural Jasmone, the odoriferous principal of Jasmin Absolute.

Pound bottles **$130.00**
Trial ounce **9.00**

FELTON CHEMICAL COMPANY, INC.
599 Johnson Ave. Brooklyn 37, N. Y.

521—FORSYTHIA VERLEY

The refreshing Forsythia note is now available for your entire cosmetic and fragrance line. Following 'Forsythia Verley', we have developed:

Forsythia for Brilliantine @ $10.00 lb.
Forsythia for Soap @ $ 6.00 lb.
Forsythia water-soluble @ $ 4.00 lb.
Forsythia for Aerosol @ $ 9.00 lb.

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Preparation and properties of ethylene oxide-alcohol condensation products. Max Cohen *(Mem. Serv. Chem. Etat*, 1951, **36**, 93–114).—Primary, straight-chain, saturated aliphatic alcohols with 4, 5, 6, 7, 10, 12, 14, and 16 C are treated with $(CH_2)_2O$. The solubility of the products in H_2O is determined by the relation of no. of $CH_2{\cdot}$ to no. of $CH_2{\cdot}CH_2{\cdot}O{\cdot}$ groups. The lowering of γ by these condensation products, at varying concn., is related to the no. of $CH_2{\cdot}CH_2{\cdot}O{\cdot}$ units in the polymer. The mechanical strength of thin films of $C_7H_{15}{\cdot}OH{-}(CH_2)_2O$ condensation products are determined and the effect of hydrophilic chain length on foaming properties is deduced. E. Somers, through *Brit. Chem. Abs.*

Aliphatic alcohols of wool wax. V. Studies in waxes. K. E. Murray and R. Schoenfeld *(J. Amer. Oil Chem. Soc.*, 1952, **29**, 416–420; cf. B., 1952, II, 390).—After removal of most of the triterpene alcohols (by crystallization from MeOH) and the cholesterol (by its insol. $ZnCl_2$ compound) from the unsaponifiable matter of wool wax, the remaining alcohols were acetylated, and the product was fractionated by amplified distillation, in a hydrocarbon diluent. Six dextro-rotatory *anti-iso*alcohols (terminal group Bu^s) with odd C no., C_{17-27}, and 4 *iso*-alcohols (terminal group Pr^i) with even C no., C_{20-26}, were isolated and identified by oxidation to their corresponding acids. P. S. Arup, through *Brit. Chem. Abs.*

Toxicity of soap and detergents. L. C. Barail *(Soap*, 1952, **28**, No. 12, 48–51, 77).—Methods used in a study of 400 products to ascertain whether a product is *(a)* a primary skin irritant, *(b)* a cutaneous sensitizer, *(c)* an acute or chronic internal poison, *(d)* poisonous when its fumes are inhaled, and *(e)* irritating to other human tissues are described. The preferred screening test for skin irrtation was single inter-

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dermal injection of animals; it is rapid, reproducible, and inexpensive. The subsequent tests cover the U. S. Public Health Service prophetic patch test, eye irritation test, painting test, and soaking test. For internal toxicity the tests were intravenous injection of an extract of the product into the blood stream of rabbits, intra peritoneal injection of the extract into the abdominal cavity, and feeding an extract. Inhalation tests for volatile substances are described. The general characteristics of (1) industrial soaps and anionic detergents, (2) cationic and non-ionic detergents, (3) household soaps, and (4) sanitizers and disinfectants are dealt with. Manufacturers strive to eliminate hazards; the major hazards arise through consumer carelessness. G. Helms, through *Brit. Chem. Abs.*

Extraction of essences by volatile solvents. P. Teisseire (*Rech. Roure-Bertrand Dupont*, 1952, No. 2, 11–19).—The reactions which occur when flowers are immersed in volatile solvents is discussed. All traces of olefines which may polymerise or form peroxides capable of polymerising the essential oils must be excluded. Extraction equipment is either static or dynamic. From both types the essence which is produced may not reproduce faithfully the smell of the flowers and work to improve this has been on *(a)* studies of the hydrolysis of the glycosides prior to hydrolysis, and *(b)* methods using low-b.p. solvents, thereby reducing hydrolysis and diastasic action during the extraction. Light petroleum extractions have been studied and by heating some extracts in the presence of metals such as Cu, Fe, etc., the final essence is independent of the treatment except with Cu. The alteration in odour of the extract must lie in the extraction process. Diastases may react immediately on contact of the solvent with the flower. Low temp. is preferred for the extraction. Equipment suitable for use with C_6H_6–PhMe mixtures is described, and the extraction of jasmine is discussed with particular reference to the possible manner in which the noxious indole is produced. R. H. Peters, through *Brit. Chem. Abs.*

Metal cleaners. Milton A. Lesser (*Soap*, 1952, **28**, No. 11, 46–49, 98).—Processes and formulations used in metal cleaning operations, *e.g.*, mechanical spray-type washers, electrocleaners, degreasing plant, diphase cleaners, acids as metal cleaners, "special function" cleaners, are described. G. Helms, through *Brit. Chem. Abs.*

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Chemists to Hear Views on Water-, Airborne Wastes

A symposium "Waterborne and Airborne Wastes" will be held at an Open Door dinner-meeting of the Assn. of Consulting Chemists & Chemical Engineers, Inc. on April 27 at 5 P.M. at Hotel Belmont Plaza, New York City. Guest speakers will be Harry A. Faber, associate editor of *Water and Sewage Works,* and William G. Christy, consulting engineer, with Roger C. Blum, of Jos. K. Blum, consulting engineers, as moderator.

Mennen, Pond's Packages Win in Variety Packaging Competition

The Mennen Co.'s Baby Powder package and Pond's Extract Co.'s Angel Face Powder package won Silver Awards in the cosmetics and toilet goods division in the 18th National Variety Packaging Competition.

The Mennen package was designed by Francis Blod of Design Associates, Ltd., New York; the Angel Face Powder package was designed by Joseph B. Blatt, New York.

Atlas Powder Co. Sponsors Eight $1,000 Scholarships

Atlas Powder Co., Wilmington, Del., has set up eight $1,000 college scholarships for science students, president Ralph K. Gottshall has announced.

Lady Esther Announces Sales Post Changes

Lady Esther has announced the following changes in its sales territorial assignments: Kenneth Freedman, Toledo, Cleveland, Eyria, Lorain and Bowling Green, O., in addition to Mich. and Ind.; Joseph O'Keefe, Ky., as well as W. Va., western Pa., and Ohio, except the territory covered by Mr. Freedman; James Dade will eliminate Ky., but will continue to cover Kan., Mo., Tenn., and southern Ill.

Chicago S.C.C. Witnesses Fire Magic Demonstration

Smoke rings, green flames, and minor explosions were the order of the day as Dr. Llewellyn Hard of Whiting, Inc., research chemist for Standard Oil Co., gave a lecture demonstration of "Fire Magic," the story behind combustion, before the Chicago chapter of the S.C.C. at the annual Ladies Night meeting on April 13 at Henrici's Restaurant in the Merchandise Mart.

MELVIN A. BLOCK, president of the Block Drug Co., will head the annual Joint Defense Appeal campaign in Greater New York. The drive seeks to raise half of the national goal of $5,000,000 in the New York area.

Melvin Block

HOWARD J. BORK has been appointed superintendent of the Wildroot Mfg. Corp.

DR. HARRY B. McCLURE has been appointed president of Carbide and Carbon Chemicals Co., a division of Union Carbide and Carbon Corp. He succeeds DR. J. G. DAVIDSON who becomes chairman of Carbide and Carbon Chemicals Co. Dr. Davidson is also a vice-president of Union Carbide and Carbon Corp.

DR. IVOR GRIFFITH, president of the Philadelphia College of Pharmacy and Science, was honored recently at a testimonial dinner attended by more than 100 members of the faculty, board of trustees and others.

MISS FREDA PREBBLE, secretary of the London branch of Mary Chess, has returned to Britain following a month's visit with the parent company. While here, she made a special study of American production methods.

LOUIS H. LIBBY, formerly with the Soap Div. of Armour & Co., has been appointed director of detergent research of the Toni Div. of the Gillette Co.

PRESTON FURMAN, who has been with the Heyden Chemical Corp. continuously for 52 years, including 34 years in the Heyden Sales Dept., retired on March 1, president SIMON ASKIN has announced.

DR. HERMAN SOKOL has been elected vice president in charge of research and development of the Heyden Chemical Corp.

HENRY B. ZIEGLER, formerly sales manager for the Durite Div. of Borden Co., has been named sales manager of Wilson & Co.'s Wilson-Martin Div.

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Dr. Oliver L. Marton Tells What Perfumes Are and How Made

Before a large and interested audience at the annual Ladies Night dinner of the Chemical Engineers of Greater New York, Dr. Oliver L. Marton, chief perfumer,

Dr. Marton examines his slides

Shulton, Inc. gave an illustrated lecture on "Perfumes: What they are and How they are made." The origin of essential oils used in perfumes and how they are obtained created especial interest; and in fact the entire lecture illustrated with colored slides held the attention of the audience. At the conclusion of the lecture perfume favors were distributed to the ladies. President John J. Glover, who presided, introduced Dr. Marton.

Dr. Marton was educated in Turkey and in Austria where he studied under two Nobel prize winners. He was associated with the Friedlander Laboratories in Berlin, Germany, before coming to the United States. He founded and operated the firm of Marton Freres in New York until 1942 when he joined Shulton Inc. as chief chemist, later becoming chief perfumer.

Seated at the table in the photograph from left to right are Mr. and Mrs. George Foy, Dr. and Mrs. O. L. Marton and President and Mrs. John J. Glover.

Boston BIMS' First Ladies' Night April 24

The first ladies' night for BIMS of Boston will be held on April 24 at Weston Golf Club, Eston, Mass., chairman Hart Harris, Jr. of S. B. Penick & Co. announces. There will be music by an orchestra, prizes and favors for the ladies.

The golf outings for the summer season will be held June 24 at Weston Golf Club, August 19 at Dedham Country & Polo Club, Westwood, Mass., and the final outing at the Nashua Country Club, Nashua, N. H. on September 15.

About 60 members and guest attended the recent winter party at the Weston Golf Club. Features included a steak dinner, bowling, and the awarding of prizes to Harold Coleman, Rexall Drug Co.; Benjamin F. Sands, Richard Nippes of Columbia Southern Chemical Co., Jack Conover of L. Sonneborn & Sons, Emory Wright, Jack Van Dewater of R. W. Greeff & Co., Irving G. Loxley of Heyden Chemical Co., George Blake of Givaudan-Delawanna, and Richard Swanson of Raffi & Swanson.

Talks on Peacetime Use of Radioactive Isotopes

"Peacetime Use of Radioactive Isotopes" was the subject of an address of Dr. Henry J. Gomberg, assistant director of the Phoenix Project, at the March 22 meeting of The Chemical and Allied Industries Assn. of Michigan.

New Officers of Hazel Bishop Inc. Announced

Norman Jay has been elected president and Donald Burr has been elected vice president of Hazel Bishop Inc. According to Chairman Raymond Spector sales are running about 50% ahead of last year and the advertising budget for the current fiscal year is $5,500,000.

Committee Formed for Toilet Goods Industry Golf Match

Paul E. Forsman, chairman of the 1954 Committee for the Toilet Goods Industry Golf Tournament, has announced his committee, as follows: Sydney A. Finer, Pond's Extract Co.; John E. Gabrielsen, Avon Products, Inc.; Philip J. Heinle, Lever Bros. Co. and James H. R. Stephenson, Albert Verley & Co.

The tournament will take place on May 10 at Winged Foot Golf Club in Mamaroneck, N.Y.

Dr. Victor Fourman Greeted by President of Haiti

While on an extended business and pleasure trip through South America and the Carribean sea, Dr. Victor Fourman of Syntomatic Corp. and Mrs. Fourman were introduced to the president of Haiti. The president was much interested in developments in the production of essential oils and found much of interest to discuss with Dr. Fourman. The trip included visits in Jamaica, Colombia and both terminals of the Panama Canal.

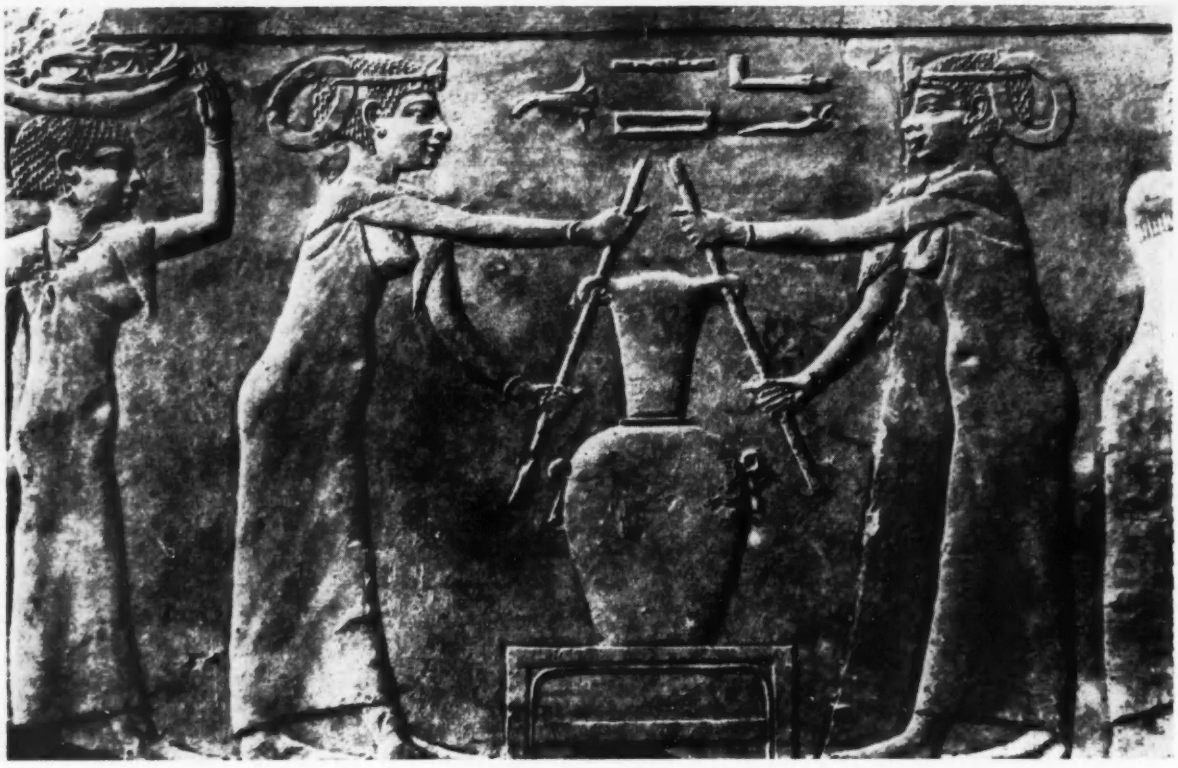
Fallek Products Co. Transfers Its Offices in Same Building

Fallek Products Co. has transferred its offices to the 21st floor of 165 Broadway, New York, 6, N.Y.

The Speakers Table: Mr. and Mrs. George Foy, Dr. and Mrs. Oliver Marton and President and Mrs. John J. Glover.

No. 1 of a Series

PERFUME THROUGH THE AGES



Two girls pressing lilies for the preparation of etherial oil. Neo-Egyptian, about 859 B.C.

(Photo courtesy Bettman Archive)

Ancient Egypt was a fabulous mart for rare and exquisite fragrances. Women wore necklaces of scented beads, guests were annointed with streams of perfumes before all ceremonies, and incense was burned to the gods at dawn, noon and sunset. Flowers were pressed in individual households by hand, as shown in illustration above . . . the delicate lily being one of the most popular. To the creative perfumer of today, Lily of the Valley presents an absorbing challenge in fragrance simulation. From the D&O Perfume Laboratories a new specialty . . . PRIMAVERA . . . expresses the gay and vibrant note of these little white bell flowers, so reminiscent of Spring. From Egypt 859 B.C. to America 1954 . . . both PRIMAVERA and the fragrant lily are ever fresh and new.

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Moderator Samuel Rubin skilfully elicits useful information from selected panel representing 50,000 fragrance consumers.

Fragrance Foundation Convention Features Consumer Panel

50,000 fragrance consumers in America were represented by a Panel of Consumers at the Fifth Annual Convention of The Fragrance Foundation held on March 11 at Hotel Plaza, Ney York, with over 300 executives of the fragrance industry attending. 11,000,000 community service women were represented by Mrs. Eli Silberfeld; 4,391,344 office workers were represented by Mrs. Doris Riter; 3,179,541 industrial workers were represented by Mrs. Janet Coyle; 16,015,100 young marrieds were represented by Mrs. R. E. Goodwin; 1,963,582 executive women were represented by Miss Lillian Weiss; and 7,700,000 teen-agers were represented by Miss Carol Sitton. The panel, moderated by Samuel Rubin of Faberge, Inc., answered questions about consumer reactions to fragrance products, such as: buying impulses, methods of purchase and use habits.

The meeting opened with a business session at 11 A.M., featuring open discussion from the floor, election of officers and directors, financial and other reports. Following a noon reception, luncheon was served in the Ball Room.

After luncheon, Thomas B. Haire, chairman of the Convention Program Committee and publisher of *Cosmetics and Toiletries*, spoke on "The Foundation Today," out lining the growth of the organization over the past five years. The Foundation's six-minute color film, "Fragrance for Living . . . and Giving," was shown, after which Miriam Gibson French, executive director, spoke on "What Lies Ahead," projecting the future of the organization.

The feature of the afternoon was the Consumer Panel.

The following officers were re-elected for a one-year term: president, H. Gregory Thomas, Chanel, Inc.; vice-president, Jean Despres, Coty, Inc., vice-president, Pierre Harang, Houbigant Sales Corp.; secretary, A. L. van Ameringen of van Amerigen-Haebler, Inc.; treasurer, Frazer V. Sinclair, *Beauty Fashion*.

Directors elected to serve a term of two years were: Edouard Cournand, Lavin Parfums, Inc.; Charles Granville, Angelique, Inc.; Oscar Kolin, Helena Rubinstein, Inc.; Charles Pennock, Hudnut Sales Corp.

Directors elected to serve a term of one year were: Charles Bryan, Firmench & Co.; Pierre Coutin, Roure-Dupont, Inc.; Joseph Danilek, Mary Chess, Inc.; Ernest R. Durrer of Givaudan-Delawanna, Inc.; Thomas B. Haire, *Cosmetics & Toiletries;* and Owen Stoner, Prince Matchabelli, Inc.

Directors remaining on the board are: Wilbur Canaday, Lentheric, Inc.; Paul Carey, Tussy Cosmetiques; Bernard d'Escayrac of Guerlain, Inc.; Davis Factor of T.G.A.; S. L. Maha, T.G.A.; J. I. Poses, D'Orsay Parfums; Russell Rooks, Avon Products, Inc.; Samuel Rubin, Faberge, Inc.; F. E. Schoninger, Antoin Chiris, Inc.; Benson Storfer, Parfums Corday; and J. S. Wiedhopf of Parfums Ciro, Inc.

Executive Director Miriam Gibson French will retire May 1.

New board members of Fragrance Foundation: Edouard Cournand, Charles Granville, J. S. Wiedhopf, Samuel Rubin, Fred E. Shoninger, H. Gregory Thomas, S. L. Mayham, Jean Despres and Thomas B. Haire.

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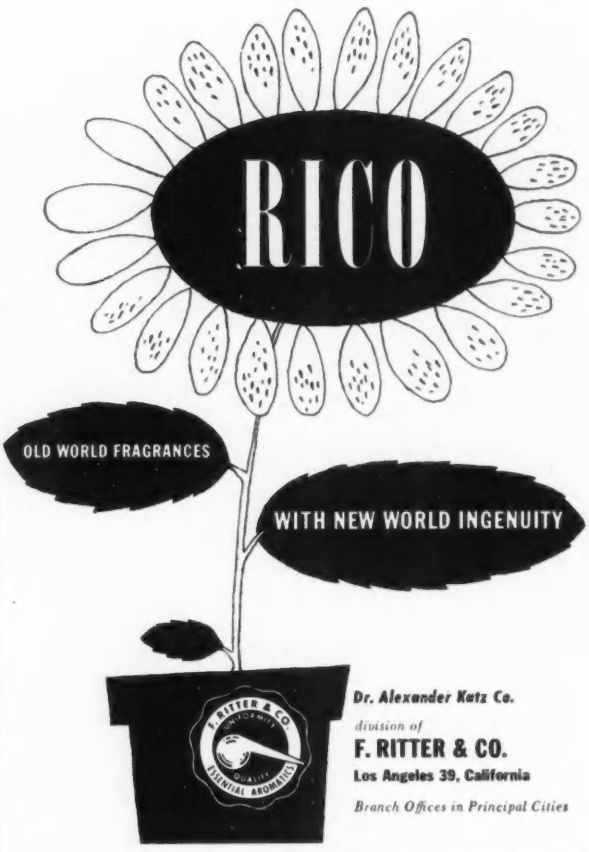

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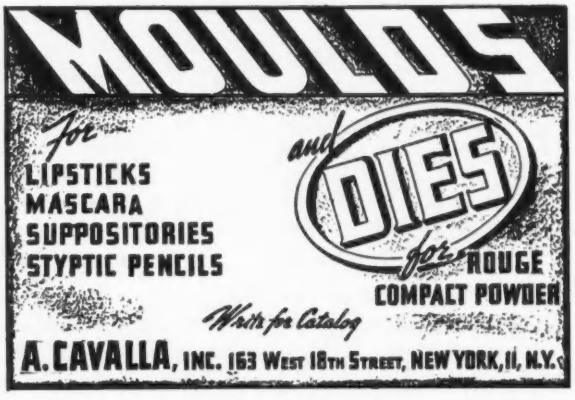

Dr. Ernest Guenther Feted in Paris by French Chemists

Dr. Ernest Guenther, vice president and technical director of Fritzsche Brothers, Inc., New York, has just returned to the firm's home headquarters following a two months' visit to Europe. Dr. Guenther traveled through Germany, France and Italy, making a side trip to Sicily for the purpose of studying the latest developments in the production of citrus oils. He contacted many lemon producers and government officials and the impression he gained was that the production of lemon oil in Sicily is gradually increasing. He reports that while no definite remedy has as yet been found to combat the dreaded mal secco disease which has done so much damage to the old type of lemon trees in Sicily, at least a further spread of this malady has been stopped. The growers now have learned what countermeasures are necessary to offset this blight. The most effective results have been accomplished by resorting to tree surgery the moment any signs of mal secco appear in a grove. Also, the growers are again planting the old type of lemon tree which produces a much better fruit and better oil than that derived from the so-called monachella tree which they had been introducing into their groves for some years because of its greater resistance to the mal secco.

The highlight of Dr. Guenther's trip took place on February 12 when he was the honored guest and principal speaker at a meeting of the Société de Chimie Industrielle which was held in the magnificent Maison de la Chimie in Paris. Robert Bienaimé, Président d'Honneur du Syndicat National de la Parfumerie Francaise, introduced Dr. Guenther, whose lecture subject was "The Production of Essential Oils" with particular reference to developments in the Western Hemisphere. Dr. Guenther elucidated on the difficulties connected with the establishment of a new essential oil industry in the various Latin American countries.

In the capacity-filled auditorium were more than 300 representatives of the chemical industry, including those of leading Paris perfume and cosmetic houses. Many had come from distant points in France and other parts of Europe, among them Dr. Yves-René Naves, director of research of Givaudin & Cie., Geneva, Switzerland, and the distinguished 1952 Fritzsche Award winner; John H. Seager, technical director of Yardley & Co. Ltd. of London; Dr. Fernando Modern, professor of chemistry at the University of Buenos Aires, Argentina; and Pierre Chauvet of Seillans (Var), France.

Dr. Guenther's talk, given in French, and accompanied by motion pictures, lasted about 2½ hours and was enthusiastically received by the audience.

A luncheon given in honor of Dr. Guenther by the Société des Amis de la Maison de la Chimie preceded the lecture. This luncheon, held in the same building, was attended by some of the most prominent men in the French perfume industry. Patten D. Allen, commercial attache of the American Embassy in Paris, and W. Roy Weeks, President Emeritus of the American Chamber of Commerce in France were among those present. M. Deschiens, Délégué Général de la Société des Amis de la Maison de la Chimie introduced Dr. Guenther and eulogized him for his work as author of the six volumes entitled "The Essential Oils." In his welcoming remarks, Mr. Deschiens pointed out that the Société des Amis de la Maison de la Chimie was an institution established in 1934 and dedicated to intellectual, cultural, scientific and industrial activities in the whole field of chemistry. "At that time," he said, "65 nations participated in the work and helped build this home. . . . Here at the Société des Amis de la Maison de la Chimie, we number among our activities the privilege of developing to the fullest the hospitality of this place so that chemists throughout the world, as well as others interested in our science, may have a place to meet. Personal contact makes for sympathy, understanding and for a feeling of unity and friendship among those of us who enter this international home of chemistry. At the express wish of those who founded it, the Maison de la Chimie houses various chemical societies, associations and groups, and through these organizations quartered here you may glimpse creative chemistry at work. On certain precious occasions—your visit is one of such, Dr. Guenther—our societies have the great honor of presenting the works of famous specialists; today this honor belongs to the Société de Chemie Industrielle, the president of which is the eminent perfumer Robert Bienaimé."

Mr. Bienaimé presided at the evening's presentation.

Six Danish Industrial Engineers Tour Plant

Six Danish industrial engineers, visiting this country under the auspices of the Foreign Operations Administration of the U.S. State Department and through the cooperation of the Ford Foundation Council on International Progress in Management were the guests of Old Empire Mfg. Chemists, Inc., of Newark, New Jersey.

The visiting engineers, prominent consultants and educators in Denmark, are currently spending several weeks in the United States to study American production techniques. The visitors, all professors at their respective universities, are:

K. E. Bredhal-Soerensenn, Technical College; Carl Johansen, College of Mechanical and Electrical Engineering; Hans K. V. Jensen, Danish Institute of Technology; Niels T. Agersnap, Graduate School of Business Administration; Poul A. Rosvall, Federation of Danish Industry; and Erik T. Jensen, Federation of Danish Industry.

They were accompanied by Erik Svart, of the U.S. State Department, who acted as interpreter.

The visitors were welcomed to the plant by Raymond Barnett, vice-president, after which Sidney J. Pollack, production manager of Old Empire and faculty member of Columbia University, gave them a thorough and intensive lecture on the organization, production techniques, and cost-accounting procedures of this unusual, production operation.

One-Fourth of Vacation Families Bought Cosmetics for Trips

More than one-fourth of all U. S. vacation families purchased cosmetics for their trips during the year ending March 1953 according to the fourth nation wide vacation travel survey of the Curtis Publishing Co. Purchases of cosmetics averaged $4.34 per buying family. Projected to a national basis 5,181,120 vacation families spent $22,486,061 for and while on vacation trips.

Introduces Butterscotch Flavored Potassium Penicillin

A butterscotch-flavored form of potassium penicillin, for treating children, has been announced by Parke Davis & Co. It is called Penasoid suspension.

Among Our Friends

EDGAR R. ELLIS has joined Charabot & Co., Inc., New York as sales representative. Mr. Ellis has been identified with the perfumery raw material business for many years. He is active in the Cosmetic Industry Buyers and Suppliers Assn. and has been a member of the board of directors of that organization. Charabot & Co. Inc. are sole distributors in the U. S. and Canada for Charabot & Cie, Grasse, France.

T. FRED BAKER, Eastern Div. manager for Sunkist Growers, has retired, D. R. THOMPSON, general manager of the firm's Products Dept., announces. Mr. Bakers had been in charge of sales in the area since 1926. He is succeeded by

T. Fred Baker

Peter T. Wood

PETER T. WOOD, formerly product manager of the Walter Baker Div. of General Foods Corp.

MISS MARIE V. CARROLL, executive secretary of the California Cosmetic Association was a welcome visitor to New York City during the past month. The California association now has 70 active members and is a very alert organization that is doing much to promote the interests of the industry on the Pacific coast. The month long trip east was partly vacation and partly business on behalf of the association as Miss Carroll took the opportunity of meeting many of the executives of leading cosmetic companies in the east.

GUST CARSCH has joined the organization of the Toni Co., Chicago following years of experience as a chemist and perfumer.

MIRIAM GIBSON FRENCH, executive director of The Fragrance Foundation since its inception in 1949, becomes beauty editor of *McCall's Magazine*, effective May 1, it has been announced by OTIS LEE WIESE, *McCall's* editor and publisher. PEGGY BELL, the magazine's short features and beauty editor, will now devote full time to the recently announced short features assignment. Mrs. French was formerly publicity director of Shulton, Inc., and later became beauty editor and then promotion director of *Charm Magazine*. She has had her own public relations and merchandising service handling the Guerlain, Jean Nate, John Robert Powers accounts, as well as "Fight the 20% Cosmetic Tax" publicity for the Toilet Goods Assn. She is a member of the Fashion Group, past treasurer of that group.

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JOSEPH A. HUISKING of Fritzsche Brothers, Inc. has accepted the chairmanship of the Committee for the Drug, Chemical and Allied Trades Div. of the annual appeal of Catholic Charities. He will be assisted, among others, by CHARLES S. FITZSIMMONS of Orbis Products Corp.

ANDRE PROT, commercial director of Parfumerie Lubin, Courbevoie, Seine, France, has been visiting in the United States to reestablish in this country the Lubin line which did a substantial business here prior to the war. The company was founded in 1798 during the French revolution and has been completely in the Prot family since 1814. Andre Prot, who was in the French service was wounded at the battle of Trafalgar. M. Lubin, his partner in the perfume house, relinquished his interest in 1814. The present Andre Prot is a graduate of St. Cyr, the military academy of France and served in the last war as a cavalry officer.

H. P. KESSLER, sales manager of Givaudin Flavors Inc. has returned from a visit to the company's branch offices on the West Coast. During his stay he visited, together with Givaudin sales personnel in the area, many of the firm's customers, particularly in California.

Obituary

Col. Marston T. Bogert, First S.C.C. Medalist Dead at 85

Col. Marston Taylor Bogert, an international authority on synthetic organic chemistry and one of the nation's authorities on synthetic perfumes died in a Long Island convalescent home March 21 from pneumonia at the age of 85 years. He had been actively interested in the perfume and cosmetic industry for years and contributed much to its scientific development. In the twenties he directed research work for the American Manufacturers of Toilet Articles with a view towards finding a relation between graphical structure and odor. At the December 1948 annual meeting of the Society of Cosmetic Chemists he was awarded the first medal for outstanding service given by the association. For years he attended the meetings of the Scientific Section of the Toilet Goods Assn. and the Society of Cosmetic Chemists and he was also a member of and much interested in the useful work of the American Society of Perfumers.

Dr. Bogert was born in Flushing, N. Y. and was educated at Columbia University where in undergraduate days he was a member of the crew. In 1894 he became an assistant in the organic chemistry

Col. Marston Taylor Bogert

department of Columbia, an instructor in 1897, assistant professor in 1901 and a full professor in 1904. All told he served 45 years on the faculty, retiring in 1939 when the became an advisor to the Evans Research & Development Co. During World War I he headed the Chemical Warfare Service of the Army. Prior to his retirement he was an exchange professor at the University of Charles, Prague. He was one of the first to see that synthetic dye plants were the source of all poisonous gases and that atmospheric nitrogen was the mother of all explosives. He spoke six languages fluently.

Dr. Bogert was an honorary member of the Royal Society of Edinburgh, Scotland; the Chemical Society of Poland and the Societe de Chimie Industrielle de France as well as numerous other scientific associations and clubs. He was twice president of the American Chemical Society and was the first American to be elected president of the International Union of Chemists. His honors included the Perkin medal, the Nichols medal of England and the Priestly gold medal, highest honor given by the American Chemical Society.

In 1928 he announced that experiments on artificial violet perfume had opened the way to laboratory manufacture of synthetic vitamins.

His contributions to scientific literature were numerous and for a number of years he was consulting editor on synthetics for the American Perfumer. Throughout the industry leading chemists and perfumers who had the privilege of studying under him pay tribute to the breadth and thoroughness of his knowledge and his skill as a teacher.

Dr. Bogert is survived by his daughters Mrs. Frank B. Tallman and Mrs. Fred K. Huber.

Dr. P. C. C. Isherwood

Dr. P. C. C. Isherwood, O.B.E., Ph.D., R.R.I.C., passed away peacefully last month, following a deterioration in health over a prolonged period.

At the turn of the century the supervision of the chemical activities of the company required reinforcement and in 1901 Dr. Isherwood was appointed chemist-in-charge of the Ash Grove and Mitcham factories.

Formerly Dr. Isherwood had been associated with the heavy chemical industry, being employed by the United Alkali Co. Ltd., and Brunner, Mond & Co. Ltd. Subsequently his career was synonymous with the growth of the fine chemical industry and in the course of his duties with W. J. Bush he travelled extensively upon the Continent of Europe, in Canada and in the U.S.

A notable contribution was made by Dr. Isherwood to Britain's national chemical requirements during the first world war when in 1916, owing to the shortage of pure zinc he erected and operated a plant under his own patents at the Bush factory at West Bank, Widnes, and received the O.B.E. in recognition of these services.

Again during the second world war the experience of Dr. Isherwood permitted W. J. Bush & Co., to contribute certain products vital to the needs of the Ministries of Supply and Aircraft Production.

In 1915 Dr. Isherwood became a director of W. J. Bush & Co. Ltd., and in 1935, on the death of A. W. Bush he assumed the office of Joint Managing Director, and it was in 1941 on the death of J. M. Bush that he became chairman.

Dr. Isherwood was a member of the Grand Council of the Federation of British Industries. He was chairman of the Assn. of British Chemical Mfrs. from 1943 to 1945 and president from 1947 to 1949, and from 1941 he was chairman of the British Essence Mfrs.' Assn. He was also a Fellow of the American Chemical Society.

Dr. Isherwood was born at Runcorn, Cheshire, in 1877. A son by his first marriage, and Mary Isherwood, his second wife, survive him.

Market Report

Vanilla, Citronella Hit New High

WHILE several items in the edible oil group suffered losses such as castor oil and coconut oil, cocoa butter displayed considerable strength and prices for vanilla beans and Ceylon and Formosan citronella oils moved up to the highest levels of the year.

The persistent upward movement in vanilla bean prices brought about by limited supplies has forced the local market to the highest level in several years. Another article to hit a high level was Japanese menthol.

Forced to Buy Replacements

Demand for essential oils and aromatic chemicals was on a fairly broad scale. Buyers, who had previously been holding back waiting to see whether it would be possible to purchase goods at more reasonable prices, finally came into the market to cover replacements; seasonal influences likewise served to stimulate activity. Confectioners stepped up their takings in preparation for the Easter holiday trade and buying for the account of the beverage, toiletry, soap, and several other consuming lines improved. The continued strength in lemongrass oil brought about a firmer situation in all of the ionones. Other firm spots in the aromatic chemical market included citronellol, citral and safrol.

Despite a series of advances that have taken place in lemongrass oil in recent months, the overall position of the market suggests further increases in prices. The possibility of Central America entering into production appears remote. Demand for citronella oils was reported as steady and in good volume. All varieties shared in the activity with the firmness in prices serving to give consumers a feeling of greater confidence in the market. All of the camphor oils were featured by a strong tone, including ocotea cymbarum from Brazil. Eucalyptus took an unexpected turn. Australia was less inclined to sell goods following higher prices from Spain and Portugal.

Several oils of domestic origin were featured by considerable strength because of reduced supplies. Export demands for wormseed have been gradually eating into available supplies in the country with the result that shipping prices have been graduatlly working upwards. Another article that displayed considerable strength was cedarwood. Local prices are fully 15 to 25 cents per pound above those in force earlier in the year. Cedarwood is an extremely popular item.

The outlook in peppermint is regarded as strong. Since most of the oil is said to be rather low in quality there is likely to be a strong demand for high test material for blending between now and the period when distillation of another crop rolls around in August. Although there is a reasonable good supply of spearmint to be had in the country, stocks will have to meet several months' demand before any fresh lots from another crop will begin to appear in the market. Both spearmint and peppermint are among the most popular articles in the group of flavoring oils.

Synthetic Camphor Reduced

Prices for synthetic camphor in powdered and tablet form were reduced March 1. The reduction marks the first change in the market since last December. Prices for USP synthetic powdered material were lowered 3 cents a pound while tablets were cut 5 cents a pound. Over a million pounds of USP synthetic camphor are used annually in pharmaceuticals, in moth repellents and in several miscellaneous items. The new and lower prices became effective March 1. The price move was believed to be an attempt to discourage the importation of the article from Formosa and Japan.

The unexpected upturn in the demand for glycerin failed to develop over the past month. The tone of the market was generally soft at the lower prices established in the latter part of February. Stocks at the end of January amounted to over 63 million pounds in contrast to 59,900,000 pounds at the end of December last year and 40,600,000 pounds at the close of January, 1953. Trade observes point out that any jump in consumption could quickly reduce the high stock level, especially in the light of small imports as compared with the first quarter arrivals of last year. However, the possibility of any immediate strengthening in glycerin prices appeared remote. While glycerin usage is widely diversified, its greatest single outlet, the synthetic resin field, has been running at a relatively low level.

Menthol Mixed

The situation in menthol was rather mixed. The price spread be'ween the two natural products has been widened by the rather substantial advances in shipping prices from Japan. Duty paid prices for Japanese material were moved up to $13 per pound while the natural product from Brazil remained at a relatively low level of $4.95 to $5 per pound, according to quantity. Production from the new peppermint oil crop in Brazil is estimated at between 80 to 100 tons. Such a quantity is regarded as rather small. However, some trade observes believe that fair size stocks of material held in this market may tend to dampen the possibility of any marked rise in duty paid prices for the Brazilian product. The demand for menthol has proved disappointing due, in large measure, to the mild winter.

Prices of iso-propyl alcohol and ethyl alcohol were reduced late in the period under review. Iso-propyl alcohol, which is competitive in several lines with ethyl alcohol, was lowered by 2½ to 3 cents a gallon.

PRICES IN THE NEW YORK MARKET

ESSENTIAL OILS

Prices per lb. unless otherwise listed.

Almond Bit, FPA per lb.	3.40@	3.80
Sweet True	.55@	.90
Apricot Kernel	.48@	.55
Amyris	1.50@	1.75
Angelica Root	70.00@	110.00
Angelica Seed	58.00@	90.00
Anise, U.S.P.	2.80@	Nom'l
Bay	1.50@	2.10
Bergamot	11.00@	14.00
Artificial	3.00@	4.75
Birchtar, crude	1.80@	2.10
Birchtar, rectified	2.55@	2.85
Bois de Rose	4.00@	4.50
Cajeput U.S.P.	2.45@	3.15
Cajeput (technical)	2.00@	2.25
Calamus	15.00@	20.00
Camphor "White"	.35@	.55
Cananga, native	9.00@	10.15
Rectified	12.60@	13.75
Caraway	2.75@	3.00
Cardamon	48.00@	Nom'l
Cascarilla	35.00@	40.00
Cassia, rectified, U.S.P.	8.00@	Nom'l
Cedar leaf, U.S.P.	2.25@	3.00
Cedar Wood	.65@	.75
Celery	16.00@	20.00
Chamomile Hungarian	180.00@	275.00
Cinnamon—		
Bark	25.75@	50.00
Leaf	1.35@	3.00
Citronella, Ceylon	.70@	.90
Java	.80@	1.00
Java type	.80@	.90
Cloves, from buds	4.35@	5.10
Leaf	1.60@	2.00
Copaiba	2.00@	2.65
Coriander	20.00@	25.00
Croton	4.35@	5.00
Cumin	4.50@	5.00
Dill—		
Weed	4.00@	4.75
Seed, Indian	2.90@	3.40
Erigeron	5.50@	6.85
Eucalyptus—		
80-85%	.90@	1.10
70-75%	.65@	.95
Fennel, Sweet	2.50@	3.25
Garlic (oz.)	8.75@	10.50
Grapefruit	3.15@	3.70
Geranium, Rose Algerian	10.00@	11.75
Bourbon	11.25@	12.50
Turkish	6.00@	6.90
Ginger	10.40@	13.00
Guaiac (Wood)	1.35@	1.75
Hemlock	2.25@	2.85
Jasmin (absolute)	235.00@	350.00
Juniper Berry	2.65@	3.25
Laurel leaf	9.85@	12.60
Lavandin	2.15@	3.00
Lavender, French—		
40-42% ester	6.25@	7.35
30-32% ester	3.00@	4.50
Spike	1.55@	2.00
Lemon, Calif.	7.25@	7.50
Italian	7.15@	10.00
Lemongrass	1.60@	1.85
Limes, distilled	5.75@	7.25
Expressed	7.75@	9.50
Linaloe wood	3.40@	4.00
Lovage (oz.)	10.00@	12.00
Mace	2.50@	3.60
Marjoram	2.00@	2.50
Neroli—		
Haitian	75.00@	100.00
French	200.00@	250.00
Nutmeg—		
East Indian	2.90@	3.50
West Indian	2.65@	3.65
Ocotea Cymbarum	.85@	1.10
Olibanum	5.60@	7.85
Opopanax	35.00@	40.00
Orange, Florida	.65@	.85
Italian	3.90@	6.00
Calif., exp.	.85@	1.25
Distilled	.80@	—
Origanum	2.00@	2.75
Orris Root, concrete (oz.)	6.50@	8.75
Concrete, extra	12.00@	15.00
Patchouli	7.65@	9.75
Pennyroyal, European	1.75@	2.40
Peppermint natural	6.00@	6.10
Redistilled	6.40@	6.55
Petitgrain	3.25@	4.00
Pimento, Berry	4.50@	5.25
Leaf	2.45@	3.00
Pinus Sylvestris	2.85@	3.50
Pumilio	3.60@	4.80
Rose, Bulgaria (oz.)	60.00@	80.00
Synthetic, lb.	30.00@	35.00
Rosemary, Spanish	.65@	.95
Sage—		
Spanish	.90@	1.25
Dalmatian	7.00@	8.15
Sandalwood, N. F.	9.50@	10.25
Sassafras—		
Artificial	.65@	.90
Snake root	30.00@	32.50
Spearmint	6.00@	6.55
Spruce	2.25@	2.75
Sweet birch Southern	2.10@	3.00
Northern	4.50@	8.00
Tansy	8.00@	8.90
Thyme, red	1.75@	2.50

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White	2.00@	3.40
Valerian, extra	95.00@	120.00
Vetivert—		
Bourbon	15.25@	18.00
Haitian	14.00@	16.50
Java	23.00@	31.50
Wintergreen, Southern	3.40@	15.00
Northern	7.25@	14.00
Wormseed	6.35@	7.00
Wormwood	5.75@	6.40
Ylang Ylang, Bourbon	20.00@	32.50
Haitian	12.85@	Nom'l

TERPENELESS OILS

Bay	3.00@	3.60
Bergamot	21.00@	29.00
Grapefruit	85.00@	95.00
Lavender	10.00@	14.25
Lemon	65.00@	70.00
Lime, ex.	80.00@	90.00
Distilled	60.00@	62.00
Orange sweet	110.00@	150.00
Peppermint	12.85@	13.65
Petitgrain	5.50@	6.50
Spearmint	11.75@	14.25

DERIVATIVES AND CHEMICALS

Acetaldehyde 50%	2.15@	2.50
Acetophenone	1.40@	1.80
Alcohol C 8	1.95@	2.25
C 9	12.50@	13.00
C 10	2.00@	2.30
C 11	13.85@	14.50
C 12	2.75@	3.50
Aldehyde C 8	9.00@	11.00
C 9	16.00@	17.10
C 10	7.00@	7.60
C 11	19.00@	21.00
C 12	14.80@	15.75
C 14 (Peach so-called)	6.85@	7.50
C 16 (Strawberry so-called)	5.85@	6.20
Amyl Acetate	.55@	.70
Amyl Butyrate	1.00@	1.25
Amylcinnamic Aldehyde	2.05@	2.50
Amyl Formate	1.00@	1.25
Amyl Phenylacetate	3.75@	4.10
Amyl Propionate	1.25@	1.60
Amyl Salicylate	.90@	1.00
Amyl Valerinate	1.95@	2.40
Anethol	1.25@	1.40
Anisic Aldehyde	2.15@	2.65
Anisyl Acetate	6.00@	6.75
Benzyl Acetate	.70@	.85
Benzyl Alcohol	.70@	.90
Benzyl Benzoate	.80@	1.00
Benzyl Butyrate	1.75@	2.00
Benzyl Cinnamate	3.70@	4.00
Benzyl Formate	1.50@	2.10
Benzophenone	1.50@	2.00
Benzyl-isoeugenol	9.00@	10.25
Benzyl Propionate	1.60@	2.20
Benzyl Salicylate	1.65@	2.00
Benzylidene Acetone	2.00@	2.75
Bromstyrol	5.50@	6.25
Butyl Acetate, normal	.14¾@	.15½
Cinnamic Alcohol	2.50@	3.25
Cinnamic Aldehyde	1.20@	1.40
Cinnamyl Acetate	3.65@	4.00
Citral, C. P.	3.85@	4.25
Citronellol	2.40@	2.85
Citronellyl Acetate	2.80@	3.20
Citronellyl Butyrate	5.50@	5.90
Cuminic Aldehyde	3.25@	4.10
Cyclonol	2.85@	3.15
Diethylphthalate	.45@	.51
Dimethyl Anthranilate	5.75@	6.00
Diphenyl Methane	1.15@	1.30
Diphenyl Oxide	.60@	.75
Ethyl Acetate	.30@	.35
Ethyl Benzoate	.85@	.90
Ethyl Butyrate	.85@	.95
Ethyl Capronate	2.40@	2.85
Ethyl Cinnamate	3.25@	3.65
Ethyl Formate	.70@	.80
Ethyl Phenylacetate	1.20@	1.35
Ethyl Propionate	.90@	1.00
Ethyl Salicylate	1.90@	2.50
Ethyl Vanillin	6.75@	7.30
Eucalyptol	1.60@	1.80
Eugenol	2.50@	3.25
Geraniol—		
Standard	.75@	1.90
Extra	2.00@	2.75
Geranyl Acetate	1.75@	2.35
Geranyl Butyrate	4.00@	4.85
Geranyl Formate	4.50@	4.95
Geranyl iso-valerate	7.75@	8.30
Guaiac Wood Acetate	4.65@	5.00
Heliotropin, dom	3.60@	4.00
Hydrotropic Aldehyde	5.90@	6.35
Hydoxycitronellal	5.50@	6.00
Indol, C. P.	17.75@	19.50
Ionones—		
Alpha	4.50@	8.20
Beta	4.65@	10.00
Iso-borneol	1.65@	1.80
Iso-butyl Acetate	.85@	1.50
Iso-butyl Benzoate	1.65@	1.85
Iso-butyl Salicylate	2.15@	3.00
Iso-eugenol	4.10@	4.85
Iso-safrol	2.10@	2.80
Linalool	5.90@	6.25
Linalyl, Acetate 92%	6.00@	6.75
75%	5.75@	6.10
Linalyl Benzoate	18.50@	20.00
Linalyl Formate	11.90@	12.85
Linalyl Propionate	12.75@	14.00
Menthol—		
Brazilian	4.95@	5.20
Japanese	13.00@	Nom'l
Synthetic, racemic	4.95@	5.10
Laevo	5.00@	5.25
Methyl Anthranilate	2.40@	2.65
Methyl Anthranilate extra	2.75@	3.10
Methyl Benzoate	.55@	1.00
Methyl Cinnamate	1.65@	2.00
Methyl Heptenone	5.20@	5.85
Methyl Heptine Carbonate	35.00@	40.00
Methyl Naphthyl Ketone	3.85@	4.10
Methyl Phenylacetate	1.10@	1.75
Methyl Salicylate	.58@	.65
Musk Ambrette	5.15@	5.30
Ketone	5.35@	5.60

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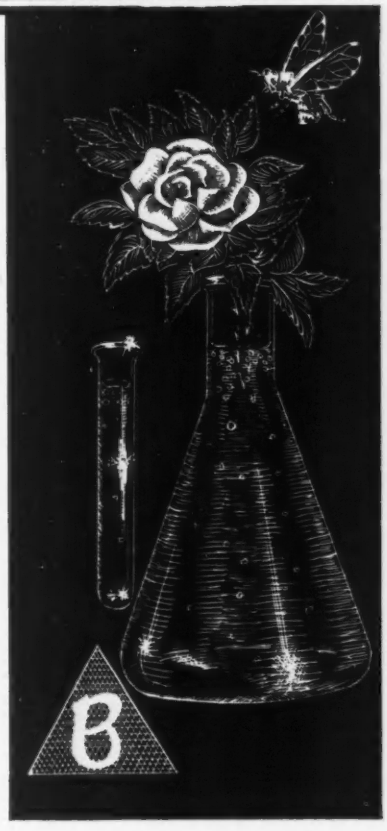

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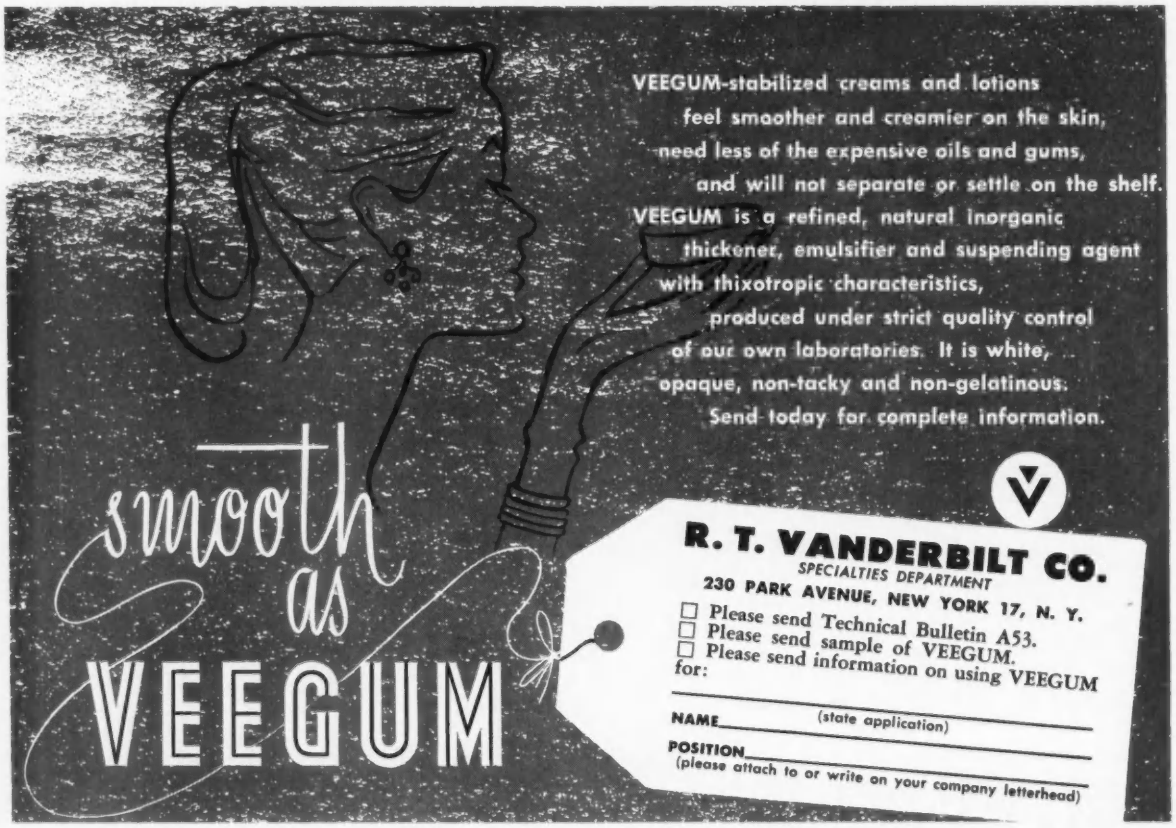

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Xylene	1.40@	1.65
Neroline (ethyl ether)	2.50@	2.80
Octyl Isobutrate	4.95@	5.30
Paracresyl Acetate	2.20@	2.75
Paracresyl Methyl Ether	2.10@	2.75
Paracresyl Phenylacetate	4.60@	5.20
Phenylacetaldehyde 50%	2.75@	3.25
100%	4.10@	4.65
Phenylacetic Acid	1.65@	2.25
Phenylethyl Acetate	1.60@	1.95
Phenylethyl Alcohol	1.60@	1.90
Phenylethyl Butyrate	4.20@	4.50
Phenylethyl Propionate	3.40@	4.00
Phenylethyl Salicylate	4.35@	4.80
Phenylethyl Valerianate	5.50@	6.00
Phenylpropyl Acetate	3.30@	3.85
Phenylpropyl Alcohol	2.50@	3.00
Safrol	1.10@	1.40
Scatol (oz.)	2.75@	3.25
Styrolyl Acetate	1.50@	2.25
Thymol, crystals	2.85@	3.25
Vanillin, eugenol	6.50@	7.25
(Guaiacol)	3.00@	3.25
Lignin	3.00@	3.25
Vetiver Acetate	42.50@	50.00
Violet Ketone Alpha	9.90@	10.25
Yara Yara (Methyl ether)	2.20@	2.70

BEANS

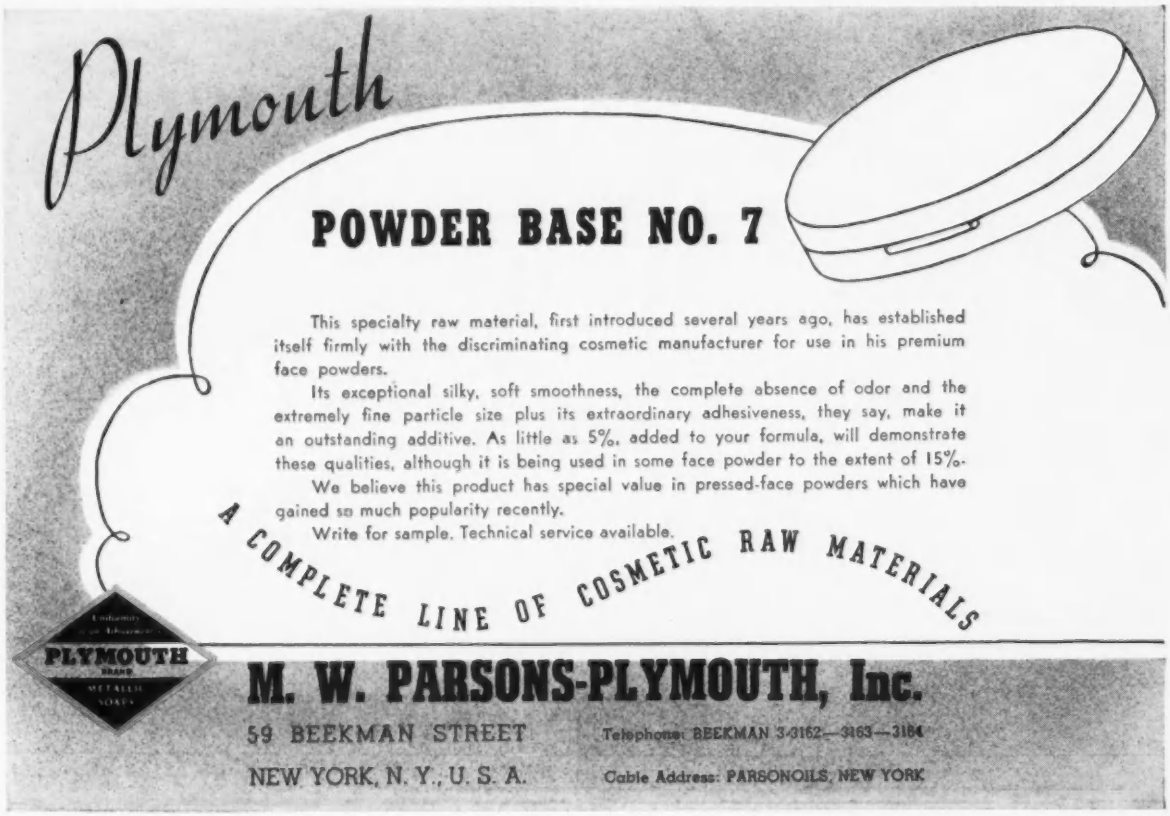
Vanilla beans—		
Bourbon	10.00@	Nom'l
Mexican, cut	9.00@	Nom'l
Mexican, whole	9.75@	Nom'l
Tahati	9.50@	Nom'l
Tonka Beans Surinam	1.05@	1.30
Angostura	1.65@	1.80

SUNDRIES AND DRUGS

Acetone	.10¼@	.14
Ambergris, ounce	9.00@	17.50
Balsam, Copaiba	.85@	1.10
Canada fir, gal.	33.00@	35.00
Peru	1.40@	1.65
Beeswax, bleached, pure U. S. P.	.65@	.70
Yellow, refined	.58@	.65
Bismuth, subnitrate	2.65@	
Borax, crystals, carlot ton	67.25@	91.75
Boric Acid pwd. U. S. P., ton	129.25@	153.75
Calcium, Phosphate	.07¾@	.08¼
Phosphate, tri-basic	.07⅝@	.08
Camphor, pwd., domestic	.54@	.56
Castoreum, nat., cans	7.00@	20.00
Cetyl, Alcohol, extra	.80@	1.15
Chalk, precip. bags, clts	.02⅞@	.03
Cherry Laurel Water, jug, gal.	1.25@	Nom'l
Citric Acid Anhydrous	.28¾@	.31¼
Civet, ounce	6.50@	10.00
Cocoa butter	1.10@	1.15
Cyclohexanol (Hexalin)	.34½@	.35
Dextrine, white, cwt.	8.53@	8.68
Fuller's Earth Mines ton	27.00@	30.00
Glycerin, C. P.	.29½@	.30
Soap Lye, crude	.18@	.20
Gum Arabic, white pwd.	.40@	.45
Amber	.16½@	.17
Gum Benzoin, Siam	3.50@	3.85
Sumatra	.30@	.38
Gum Galbanum	1.25@	1.50
Gum karaya, pwd.	.20@	.32
Gum Myrrh	.35@	.40
Henna, pwd.	.25@	.26
Kaolin	.05@	.07
Labdanum	1.00@	1.85
Lanolin, cosmetic	.38½@	.48½
Anhydrous	.36@	.38
Magnesium, carbonate	.11¼@	.14
Stearate	.38@	.43
Musk, ounce	65.00@	Nom'l
Olibanum, tears	.20@	.25
Siftings	.16@	.18
Orange Flower Water, gal.	1.75@	2.25
Orris Root, Italian	.28@	.45
Paraffin, fully ref. 122-124	.08⅜@	.08⅝
Peroxide (hydrogen U. S. P.) bbls.	.03¾@	.05
Petrolatum, snow white	.06⅜@	.08⅝
Prophyleneglycol—U. S. P., drums	.17¼@	.18¼
Quince Seed	1.85@	2.00
Rice Starch	.16@	.18
Rose Flower, pale	.65@	.90
Rose Water, jug (gal.)	1.25@	1.85
Rosin, (gum) M. per cwt.	8.65@	8.75
Salicylic Acid USP	.48@	.53
Saponin No. 1	2.75@	2.80
Silicate, 40° drums, works, 100 pounds	1.70@	2.30
Sodium Carb. 58% light, 100 pounds,	2.75@	4.52
Hydroxide, 76% solid, 100 pounds	4.80@	4.90
Spermaceti	.29@	.30
Styrax Asiatic	.85@	.98
Tartaric Acid (250 lb. drums)	.37@	.41
Tragacanth, No. 1	2.75@	3.20
Triethanolamine	.26¼@	.27¼
Zinc stearate, U.S.P.	.37@	.42
Oxide, U.S.P.	.16¾@	.17¾

OILS AND FATS

Castor, refined, drums	.19½@	.20
Coconut, crude, Atlantic ports, tanks	.14¾@	.15
Refined, drums	.24@	.26
Corn, crude, Midwest, mill, tanks	.13½@	.14½
Corn Oil, refined, tanks	.16¾@	.17
Cottonseed, crude tanks	.13@	.13⅝
Lard, Chicago	.17½@	.18
Lard, Oil, common, No. 1 drums	.13½@	.14
Olive, edible (gal.)	2.35@	2.50
Red Oil, single distilled drums	.16@	.17¾
Double distilled	.18½@	.20¼
Stearic Acid Triple Pressed	.16½@	.18¼
Double Pressed	.14¼@	.15
Tallow, acidless, drums	.13¼@	.15
Tallow, extra	.07½@	.07¾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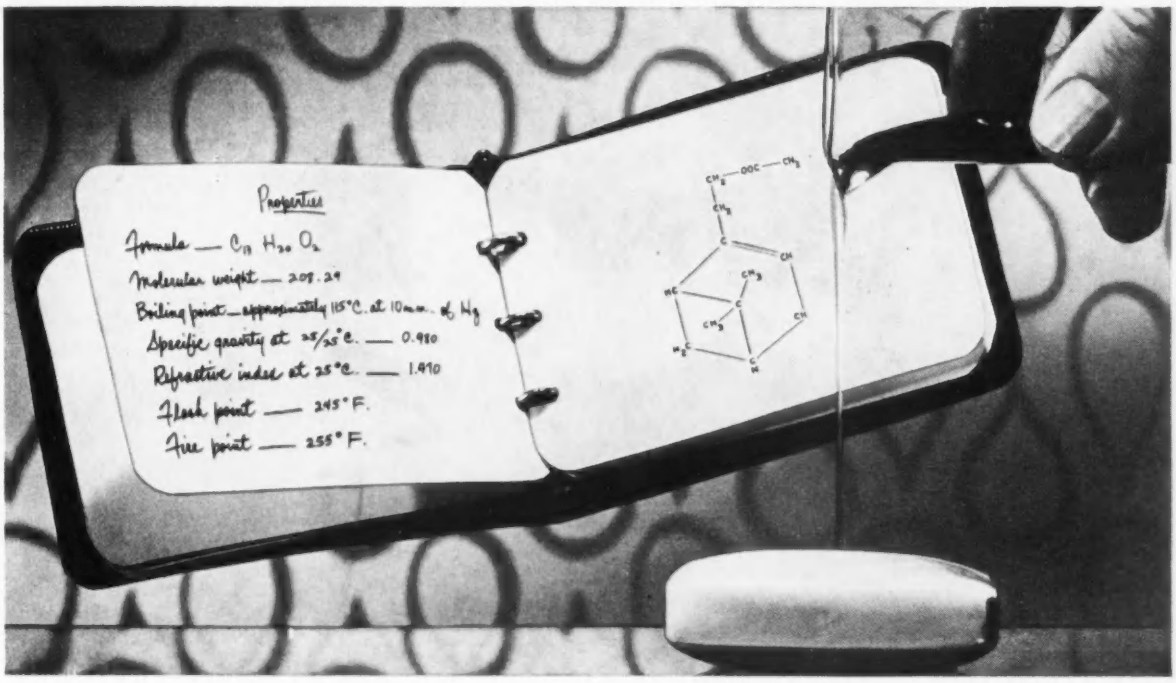
Properties
Formula — $C_{11}H_{20}O_2$
Molecular weight — 208.29
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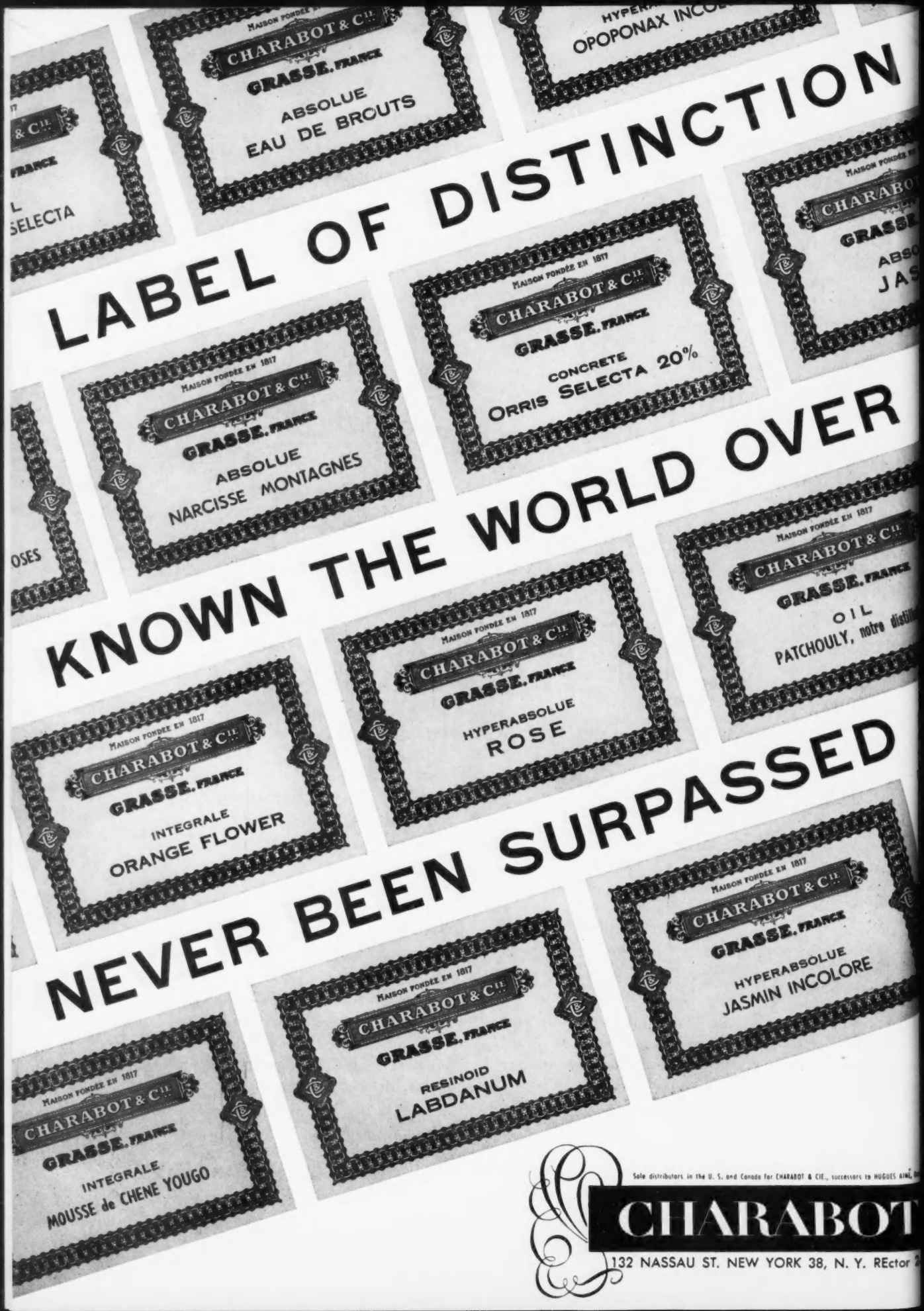
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